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AN EXPERIMENTAL STUDY OF INFLUENCE OF THE EXPERIENCED TEACHER ON TELEVISION.

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THE EFFECTIVENESS OF THE EXPERIENCED COLLEGE TEACHER WAS EVALUATED AS HE LECTURED TO STUDENTS OVER TELEVISION. FOUR PAIRS OF EXPERIENCED AND INEXPERIENCED TEACHERS WERE SELECTED FOR FOUR EXPERIMENTAL LECTURES PRESENTED WITHIN THE CONTEXT OF AN EXISTING LIBERAL ARTS COURSE. ELEMENTS WERE SO ROTATED THAT STUDENTS WERE EXPOSED TO BOTH THE CONVENTIONAL CLASSROOM AND TELEVISION TEACHING METHODS BY BOTH EXPERIENCED AND INEXPERIENCED TEACHERS. THE FACTORIAL DESIGN PERMITTED ONE TO RELATE STUDENT ACHIEVEMENT TO TEACHERS AND TO METHODS. THE TELEVISION AND CONVENTIONAL PRESENTATIONS MADE BY EXPERIENCED AND INEXPERIENCED TEACHERS APPEARED TO BE EQUALLY EFFECTIVE WHERE DISSEMINATION OF INFORMATION FOR IMMEDIATE RETENTION WAS DESIRED. EXPERIENCED TEACHERS WERE EQUALLY EFFECTIVE "LIVE" OR ON TELEVISION WHEN TEACHING STUDENTS (1) TO APPLY PRINCIPLES, (2) TO INTERPRET DATA, (3) TO THINK CRITICALLY, AND (4) TO ACCEPT ATTITUDES. THE EXPERIENCED TEACHER MADE THE STRONGER IMPRESSION ON STUDENTS ON SELECTED PERSONALITY TRAITS. SUGGESTED AIMS FOR FUTURE RESEARCH WERE THE ESTABLISHMENT OF CRITERIA FOR A SUCCESSFUL TELEVISION TEACHER PERSONALITY AND A STUDY OF THE NATURE OF THE LEARNER IN THE TELEVISION COMMUNICATIONS PROCESS. (PM)

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EVALUATION OF TELEVISION AS A TEACHING TOOL BY EXPERIENCED TEACHERS

SYRACUSE UNIVERSITY | 1961

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AN EXPERIMENTAL STUDY OF INFLUENC

OF THE EXPERIENCED TEACHER ON TELEVISION

Lawrence Myers, Jr., *Ph.D.*

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Television and Radio Department
Syracuse University
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Conducting Experiment 1—William B. Smith and Charles A. Siepmann

Conducting Experiment 2—Arthur F. Weld and Don L. Burgess

Conducting Experiment 3—Eugene S. Foster and Thomas Gmerek

Conducting Experiment 4—Leonard Aronoff and Kenneth G. Bartlett

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At various times during the study, important contributions were made by the following Research Assistants: Frederick Breitenfeld, Frank Kahn, John MacKenzie, Keith Mielke, Don Phinney, and Douglas Wardwell. The Principal Investigator for the project was Dr. Lawrence Myers, Jr., Associate Professor of Television and Radio, Syracuse University. The responsibility for the entire report lies wholly with the author.

L.M.

CHAPTER I

THE PROBLEM

INTRODUCTION

To improve the quality of instruction in American education, television has been proposed and introduced as one instrument by means of which superior teaching may be extended beyond the confines of a single classroom. Production approaches have varied from an informal filming of a lecturer in his classroom to a rigidly structured script and elaborate production using a "teaching team." Methods of transmission have varied from a cable-connected originating room—receiving room to the airborne plan in the Midwest.

Educators have not reached a consensus on a best method to achieve optimum success. Many agree with Blake that one can teach effectively by talking into a camera, and that an unaltered television presentation by an impelling lecturer is the most appropriate method for students to be exposed to the talents of "master teachers."[1] Murrow has suggested that, quite apart from formal education, the most stimulating and effective use of television is to focus on the face of an interesting person who has something important to say.[2] Proponents of the "televised lecture" imply that the value of the master teacher lies not only in the information that he imparts but also in his ability to command the attention of students, stimulate them to seek understanding, and inspire them to develop favorable beliefs, values and attitudes.

Walker wonders if superior student learning will, in fact, result from such instruction.[3] Hoban suggests that it is logical to expect a *loss* in effectiveness from televised instruction if the only independent variable is the television communication system.[4] His postulate is based on the loss of teacher-student interaction necessitated by the method. Carpenter is inclined to agree.[5] Because the image of the instructor is once removed by television, a distinct physical barrier is placed between student and teacher.[6] However, Grosslight believes that the psychological, or perceived, distance may be of greater importance than the physical distance, and he is supported by others.[7]

Other educators disagree with the "master teacher-lecture" method of televised instruction. Kanner believes that this limited concept of television *as a transmission facility fails to encourage* the adaptation of teaching methods and materials to the special requirements and advantages of television.[8] Goggin argues that the "peculiarities and potentialities of television . . . demand a dynamic reconstruction of the organization of subject matter"[9] looking toward those aspects of content that can be so visualized that they become an organic part of the lesson. Other authorities might be cited who agree with the general proposition that one should make optimum use of the video channels available, but Carpenter has cautiously pointed out that no one knows yet how the visual elements reinforce and supplement verbal communication.[10]

When one asks what kinds of knowledge can be conveyed best by means of television and by whom in what manner, no definite answers are available.[11] The general conclusion has been that courses that have included lectures and a blackboard can be "satisfactorily" televised. Countless studies have concluded that "no significant differences" are found when televised instruction is compared with conventional classroom instruction.[12] Greenhill notes that experiments comparing direct and televised instruction with the same teachers are unlikely to yield statistically significant differences in students' achievement scores.[13] Studies at Miami University do not yield consistent findings with respect to class sections taught by faculty members and by graduate students.[14] When assessing ability to solve problems and to think critically in the subject area, the television instruction was inferior to classroom instruction in one instance, but equivalent in two others. At Syracuse University, classes in the psychology of exceptional children taught over television by an authority and a non-authority showed no significant differences in achievement although students exposed to the authority were inclined to view television in a more favorable light at the conclusion of the experiment.[15] When the identical lecture on economics was presented in class and over television at Michigan State University, TV-taught students learned less on a factual test than did students in the classrooms.[16] Similar results were obtained from an advertising course that utilized many visual aids.[17] At Pennsylvania State University, a psychology course that was visualized extensively on television evinced no measurable improvement over control groups; and an air science course likewise subjected to visual treatment was accompanied by a decrease in learning.[18] At New York University, evidence suggests that students may prefer a televised course that has many production devices, but that they will not necessarily learn more from it.[19] A study at Pennsylvania State University suggested that the instructional effectiveness of a course may depend upon interaction between the mode of presentation and the instructor,[20] while a study at Michigan State University showed no mode-instructor interaction.[21]

The principal conclusion from the many and varied studies completed to date would seem to be that no one has yet presented definitive answers as to how and under what circumstances television can be used most effectively in the college classroom. Characteristics of a television teacher are inadequately defined. All we can say about visual material is that it can be learned and it can interfere with learning. McLuhan's thesis that "the medium is the message" focuses attention on distinctive characteristics of a television message and illustrates the complexity of the problem.[22]

Considerable experimentation is needed to determine how to manipulate the television tool to improve the effectiveness and efficiency of the teaching-learning process.

PURPOSE

This study proposed to evaluate television as a teaching tool under what may be described as minimal conditions of use. Television was used only as a transmission facility to present a lecture to students.

One may argue that the psychology of viewing is something to be taken into account and catered to by deliberate exploitation of visual and motor components of television communicative language, and that deliberate avoidance of any exploitation of the medium may be a distorting element as one seeks to appraise its use as a medium. On the other hand, in order to study systematically the relationships between the transmission medium and the teaching-learning process, one must "begin at the beginning."

In operational terms, the following question was asked: Can outstanding classroom teachers present lectures over a television facility with the same effect that they achieve in college classrooms; and how do they compare with teachers of average ability?

To assist in answering the general question, three major areas of interest were considered: (1) an examination of certain kinds of educational objectives that might be effectively accomplished by televised lectures; (2) an evaluation of a number of personal attributes of an instructor that may be related to his effectiveness in teaching by television; and (3) a study of the relationships between student achievement and acceptance of the instructional method.

Problem No. 1—To investigate the kinds of educational objectives that can be accomplished by superior teachers lecturing on television. On the assumption that all kinds of learning do not necessarily require comparable quality of instruction, the following hypotheses were tested:

H_1—Students will perform equally on certain measures of cognitive behavior (information gain) whether taught by means of television or in a classroom.

H_2—Students will perform equally on certain measures of cognitive behavior (information gain) whether taught by superior teachers or average teachers.

H_5—Students will perform equally on certain measures of cognitive behavior (critical thinking) whether taught by means of television or in a classroom.

H_6—Students taught by superior teachers will perform better on certain measures of cognitive behavior (critical thinking) than students taught by average teachers.

H_7—Students taught in a classroom will achieve a higher level of performance on certain measures of affective behavior (attitudes, values, discriminations) than students taught by means of television.

H_8—Students taught by superior teachers will achieve a higher level of performance on certain measures of affective behavior (attitudes, values, discriminations) than students taught by average teachers.

Problem No. 2—To investigate a number of personal attributes of teachers that can be identified by students. On the assumptions that the personality of the teacher is a crucial factor in an instructional program, that the superior teacher is a "dynamic" teacher, and that television is a "dynamic" medium of communication combining sight, sound and motion, the following hypotheses were tested:

H_9—A superior teacher will be rated higher on "activity" dimensions of meaning than an average teacher.

H_{10}—A superior teacher will be rated higher on "potency" dimensions of meaning than an average teacher.

H_{11}—A teacher in a classroom will be rated higher on "activity" dimensions of meaning than a teacher on television.

H_{12}—A teacher in a classroom will be rated higher on "potency" dimensions of meaning than a teacher on television.

H_{13}—The superior teacher will make the transition from the classroom to television with less loss of personal attributes ("activity" and "potency") than the average teacher.

Problem No. 3—To investigate the relationships between measures of student achievement and student attitudes toward televised instruction and toward teachers. The following hypotheses were tested:

H_{14}—Students who receive instruction from superior teachers will reflect more favorable attitudes toward television instruction than students who receive instruction from average teachers.

H_{15}—No significant relationships will be found between student attitudes toward televised instruction and measures of cognitive behavior.

H_{16}—No significant relationships will be found between teacher ratings and measures of cognitive behavior.

H_{17}—Significant relationships will be found between student attitudes toward televised instruction and measures of affective behavior.

H_{18}—Significant relationships will be found between teacher ratings and measures of affective behavior.

REFERENCES

1. Robert B. Blake, *College Teaching by Television*, ed. J. C. Adams, *et al.* (Washington, D.C.: American Council on Education, 1958), p. 95; in the same volume, see comments by Barclay Leatham, p. 186, Harold Whitehall, p. 211, and Harvey Zorbaugh, p. 63. See also A. E. Hungerford, Jr., *Closed-Circuit Television as a Medium of Instruction*, ed. Thomas C. Pollack (New York University, 1956), p. 52.

2. Edward R. Murrow, in a radio interview conducted by Quincy Howe for distribution by the National Association of Educational Broadcasters, 1958.

3. Eric A. Walker, *College Teaching by Television, op. cit.*, p. 72.

4. Charles F. Hoban, "Hope and Fulfillment in ETV Research," *Audiovisual Communication Review*, Vol. 6, No. 3 (Summer, 1958), p. 168.

5. C. R. Carpenter and L. P. Greenhill, *An Investigation of Closed-Circuit Television for Teaching University Courses: Project No. 1* (University Park: Pennsylvania State University, 1955), p. 46.

6. *Ibid.*, p. 58; see also Harvey Zorbaugh, "Television—Technical Revolution in Education," *Journal of Educational Sociology*, Vol. 31, No. 9 (May, 1958), p. 343.

7. Joseph H. Grosslight, College Teaching by Television, *op. cit.*, p. 43; in the same volume, see comments by Rev. Herman J. Muller, p. 187, and L. O. Morgan, p. 48; see also statement by W. E. Buckler in Zorbaugh, *op. cit.*, p. 344. Some authorities believe that perceived distance has special application in the very large lecture situation where a student may actually feel closer to the teacher when viewing a lecturer by television than when in the lecturer's physical presence but seated in the rear of a huge auditorium.

8. Joseph H. Kanner, "Future Trends in Television Teaching and Research," *Audiovisual Communication Review*, Vol. 5, No. 4 (Fall, 1957), p. 520. An example of an advantage of television is the ability of the camera to avoid distractors and focus on critical aspects of learning.

9. Richard J. Goggin, "A Professor of Communication Looks at the Teacher Teaching by Television," *Journal of Educational Sociology*, Vol. 31, No. 9 (May, 1958), p. 360; see also comments by Goggin, *College Teaching by Television, op. cit.*, p. 65.

10. Carpenter and Greenhill, *op. cit.*, p. 82.

11. Presley D. Holmes, Jr., *Television Research in the*

Teaching-Learning Process (Detroit, Michigan: Wayne State University Division of Broadcasting, July 1, 1959), p. 81.

12. *Ibid.*, pp. 36 ff. and Appendix A; for earlier examples, see Hideya Kumata, *An Inventory of Instructional Television Research* (Ann Arbor, Michigan: Educational Television and Radio Center, December 1, 1956).

13. L. P. Greenhill, "New Directions for Communication Research," *Education on the Air* (Columbus: Ohio State University, 1959), p. 214.

14. F. G. Macomber and Laurence Siegel, *Report No. 2: Experimental Study in Instructional Procedures* (Oxford, Ohio: Miami University, October, 1957), p. 30.

15. Lawrence Myers, Jr., Charles Weidman and Edward Cavert, *A Comparison of the Effectiveness of an Authority and a Non-Authority on Closed-Circuit Television*, Unpublished Research Study, Syracuse University, Syracuse, New York, 1958.

16. Hideya Kumata, *Attitude Change and Learning as a Function of Prestige of Instructor and Mode of Presentation* (East Lansing, Michigan: Communications Research Center, Michigan State University, 1958), p. 103.

17. *Loc. cit.*

18. C. R. Carpenter and L. P. Greenhill, *An Investigation of Closed-Circuit Television for Teaching University Courses: Report No. 2* (University Park: Pennsylvania State University, 1958), p. 17.

19. Hope L. Klapper, *Closed-Circuit Television as a Medium of Instruction at New York University, 1956-1957* (New York: New York University, 1958), p. 37.

20. Carpenter and Greenhill, *Project No. 1, op. cit.*, p. 52.

21. Kumata, *op. cit.*, p. 100.

22. Marshall McLuhan, "Electronics and the Changing Role of Print," *Audiovisual Communication Review*, Vol. 8, No. 5 (Supplement 2, 1960), p. 79.

CHAPTER II

EXPERIMENTAL DESIGN AND PROCEDURES

INTRODUCTION

This project was considered as an initial exploration to determine the nature and extent of influence of the master teacher on television. The method used was to compare the effectiveness of superior and average teachers as they presented lectures to university students in a conventional classroom and over closed-circuit television facilities.

For the research, four experimental lectures were prepared by superior teachers and kinescoped for later presentation via closed-circuit television. Four average teachers were selected by competitive audition. After extensive rehearsals they kinescoped the same lectures. Each of the four pairs of experimental lectures was rigidly controlled as to form, content, and style. The use of the television medium was deliberately limited to the transmission of a lecture from studio to classroom. Using four classrooms, a factorial design permitted a superior teacher to lecture by television and face to face in a classroom while, simultaneously, an average teacher did likewise.

Student assignments to four class sections of the course in which the experimental lectures were to be presented were randomly controlled at registration time. The lectures were presented in a context designed to misdirect attention from their experimental nature. Students had no prior knowledge of the time of the experiments. Because closed-circuit television was an instructional method normally employed for the course, experimental variables could be introduced with no disruption of student expectations or course objectives.

SELECTION OF EXPERIENCED TEACHERS

In order to maintain complete production control over class sections, course content and students, all experiments were conducted within the framework of an elective liberal arts course offered in the spring semester, 1960, by the Syracuse University Television-Radio Department.

For purposes of these experiments, a superior teacher was arbitrarily defined as one who had a minimum of ten years of successful university teaching and was considered by colleagues to be an expert or authority in the subject selected for his lecture. Recognizing the limitations inherent in these criteria, a more defensible label might be "experienced" teachers.

Following is a brief description of each experienced teacher selected for the experiment and a summary of lecture content. It should be noted that no two of these teachers were cast from the same mold; their classroom manners reflecting their personalities were quite different.

(1) Charles A. Siepmann, Professor of Education, Chairman of the Department of Communication in Education at New York University. Professor for twenty years at Harvard University and New York University. Formerly Director of Talks for the British Broadcasting Corporation. Field of specialization: Philosophy of broadcasting.

Topic: Freedom and Responsibility in Broadcasting.

Summary of Lecture: Definition of freedom and means of acquiring same. Necessary association of freedom with responsibility. Discussion of the extent of power of broadcasting and the ambivalent nature of power. A principle governing the control of power by government. The challenge of democracy and the role of broadcasting in meeting the challenge. Belief in sacredness of the individual. Necessity for reliance on trained intelligence for survival. Citizen's responsibility in society and broadcasting.

(2) Arthur F. Weld, Associate Professor of Television at Michigan State University. Professor for eleven years at Brown University, Syracuse University and Michigan State University, with professional experience as a producer-director at television stations in Schenectady, New York, and Washington, D.C. Field of specialization: Television programming.

Topic: Censorship in the Mass Arts.

Summary of Lecture: Definitions of mass art and censorship. Description of four types of censorship and the consequences of each. Review of legal history of one aspect of censorship. Vulnerability of mass media to censorship and special problems of television. Situations conducive to censorship. Relationship to concepts of freedom of speech and artistic expression. The citizen's role.

(3) Dr. Eugene S. Foster, Associate Professor of Television and Radio, Chairman of the Television-Radio Department at Syracuse University. Professor for fifteen years at University of Missouri, University of Maryland, and Syracuse University. Consultant for the International Cooperation Administration. Field of specialization: Educational broadcasting.

Topic: What is Great Television?

Summary of Lecture: An organization of all programs on the basis of their purpose. Definition of an educational program as one whose purpose is significant and non-controversial. The types of programs belonging to each purposive category. Suggestion that a satisfactory balance of all types is best guarantee of a "great" television service for this nation, and that more attention must be given to educational programs.

(4) Dr. Kenneth G. Bartlett, Professor of Radio and Television, Vice-president for Public Affairs, Director of the Television and Radio Center, Syracuse University. Outstanding educator in broadcasting for twenty-five years; past member of many national television awards committees. Area of specialization: Training for broadcasting as a profession.

Topic: Seeing the Best in American Television.

Summary of Lecture: An essay on television programming. The search for excellence. Characteristics of the medium. Documentaries and spot news programs. Drama, comedy, music programs. Status of locally originated programs. Public image of television. Necessity to encourage better programming by "praising the best." Suggestion that stations should account annually to their public for their program stewardship. Need for sight and sound libraries to supplement print.

SELECTION OF INEXPERIENCED TEACHERS

Quite distinct from quality, television potentially offers an economical advantage only for those college classes with large numbers of students and many sections which usually occur in the first years with "required" courses. Such instruction is often handled by graduate students under the guidance of a senior professor. The practicalities of college instruction thus suggest comparisons of the use of the best teacher on television versus graduate student-teachers in the classroom.

For this study, an average teacher was therefore defined as a graduate student studying in the field of television. Of necessity, he lacked teaching experience. His task was to present the same subject matter contained in the lecture by the experienced teacher in the same sequence although not necessarily in the same words. He was under a double-barreled challenge to do the best job of which he was capable. He hoped to do as well as the "master" and the Television-Radio Department wanted the students to get the best possible instruction.

The medium of television was deliberately restricted to its use as a device to transmit the teacher and his message to students in classrooms. The lectures were likewise restricted to the presentation of verbal material by a personality without embellishment by special visual devices. The task of the graduate student was to study the lecture of his experienced counterpart until he could present the material with confidence and clarity. The inexperienced teacher working from a prepared lecture became, in effect, a public speaker on this occasion.

Ten graduate students responded to an audition call. Applicants were given transcripts of one lecture and asked to learn a short section. Each was given an identification number and then kinescoped. The professorial staff of the Syracuse University Department of Public Address judged and rated the kinescoped auditions on the basis of established public speaking criteria. The four highest-rated students were thus selected and given their assignments.[1]

EXPERIMENTAL DESIGN
(*Production of Lectures*)

All lectures were carefully controlled as to their content, form and style.

The plan was, generally, to limit the use of the television medium to the simple transmission of a formal thirty-minute lecture by a teacher in a studio to a student in a classroom. Each lecture was introduced by an off-camera voice talking over two title cards, one identifying the Syracuse University Television-Radio Center, and the other identifying the lecturer by name only. Announcer's comments were limited to name and present position of lecturer in order to avoid as much as possible any "halo" effect which might accompany impressive accomplishments.

The following introductions were used for the experienced teachers:

"(TITLE CARD NO. 1) The Syracuse University Television and Radio Center presents a lecture by (TITLE CARD NO. 2a) Professor Charles A. Siepmann, Chairman of the Department of Communications in Education at New York University. His topic: 'Freedom and Responsibility in Broadcasting.' Here is Professor Siepmann."

"(TITLE CARD NO. 1) The Syracuse University Television and Radio Center presents a lecture by (TITLE CARD NO. 2b) Arthur F. Weld, Associate Professor of Television at Michigan State University. His topic: 'Censorship in the Mass Arts.' Here is Professor Weld."

"(TITLE CARD NO. 1) The Syracuse University Television and Radio Center presents a lecture by (TITLE CARD NO. 2c) Dr. Eugene S. Foster, Associate Professor of Television and Radio at Syracuse University. His topic: 'What is Great Television?' Here is Professor Foster."

"(TITLE CARD NO. 1) The Syracuse University Television and Radio Center presents a lecture by (TITLE CARD NO. 2d) Dr. Kenneth G. Bartlett, Professor of Television and Radio at Syracuse University. His topic: 'Seeing the Best in American Television.' Here is Professor Bartlett."

Similarly, the following introductions were used for the inexperienced teachers who could not rightfully be given artificial titles of the same rank:

"(TITLE CARD NO. 1) The Syracuse University Television and Radio Center presents a lecture by (APPROPRIATE TITLE CARD) (NAME), a member of the staff of Syracuse University. His topic: (INSERT) . Here is Mr. ______________________."

As each introduction concluded, the title card dissolved to the teacher as the camera was in process of completing a brief dolly-in to a medium shot. Each televised lecture was then produced with one camera in a generally stationary position projecting a "medium" or "waist" shot of the teacher. Each teacher, in turn, talked to the camera lens as if it represented the only student to whom he was speaking.

Insofar as possible, the lectures were confined to a presentation of the teacher without embellishment in a setting devoid of visual distractors. The barest background was used in an effort to have nothing in the situation, or setting, that might contribute to interest or attention. The temptation to recreate a classroom in the television studio was carefully avoided. Plain studio drapes constituted the background. The foreground contained only those pieces of furniture absolutely required by the teacher. These were:

Lecture No. 1—small table

Lecture No. 2—table and leather chair

Lecture No. 3—podium and blackboard

Lecture No. 4—lectern

While achieving simplicity of setting, care was taken that the teacher was not put in a setting which detracted from such influence over students as he might be able to work personally. Minor variations in presentation of each lecture by the experienced teacher were therefore allowed, but only as they were normal to the teacher. Lecturer No. 1 sat on the edge of the table for the entire thirty minutes. Lecturer No. 2, in the course of thirty minutes, sat in the chair, stood, moved to sit on the edge of the table, stood, returned to the chair, and stood (moving slightly forward) for his final point. Lecturer No. 3 moved from the podium to the blackboard, returned to the podium, moved again to the blackboard for a secondary summary, and concluded at the podium. Lecturer No. 4 stood at the lectern for the half hour.

Teachers were not permitted to "play" with television by use of electronic tricks such as superimposures, split screens, or even simple cuts from one camera to another. Neither were they permitted to use stimulating pictorials or to change the scale of the pictures from medium to close shots, or some other variety. They could rely only on their own magnetism and enthusiasm and authority. In conformity, neither Lecturer No. 1 nor Lecturer No. 4 made use of any special visual devices. Lecturer No. 2, as an attention-device, held up a Spanish-language edition of "Lady Chatterley's Lover" to introduce the subject of censorship. Lecturer No. 3 was permitted the luxury of the use of a blackboard on which he outlined a classification system for television programs.[2]

Concerning the style of delivery, Lecturer No. 1 and Lecturer No. 2 used no visible notes. At the producer's insistence, each had available one large sheet of cardboard out of camera range on which was drawn an outline of the lecture to assure the teacher that no points would be inadvertently overlooked during his lecture. Lecturer No. 3 referred briefly to a single page of notes on his podium, and quoted from a 3x5 card. In contrast, but quite in character, Lecturer No. 4 worked from a prepared manuscript that was clearly visible at all times.

To permit widest possible application, each teacher attempted to create a lecture that would have equal applicability to a class studying television—which was the case for the experiment—and to a class studying citizenship or sociology or some similar subject. The goal of each lecture was to challenge the student, present a point of view while permitting the student to draw his own conclusions, and encourage him to further activity. A certain number of facts were automatically included in each lecture. But the emphasis during lecture preparation was on areas other than "information gain"—areas that students couldn't "get from books"; in other words, material that, of itself, warranted a teacher "professing" to some students.

No information contained in the textbook used in conjunction with the course was included in the lectures in order that later test results might not be confounded by more than one possible source from which students could obtain information.

Meantime, each graduate student who had been selected to participate in the experiment as an "inexperienced" teacher was given a transcript of the experienced teacher's lecture with instructions to learn the material sufficiently to be able to present the lecture with confidence to a class as well as over television. Each was to present the essential subject matter in the same sequence, but in his own words. However, in most cases, the students discovered that, with their relatively limited backgrounds, they were unable to rephrase the concepts. They found themselves unavoidably memorizing words and phrases. In turn, an elaborate cue-card system had to be developed (in lieu of professional prompting equipment) to assist them. The experience in developing these lectures dramatically demonstrated one significant difference between the two groups of teachers. The experienced teachers had something to say and knew how to say it. The inexperienced teachers were not creators—they were puppets.

In some respects, memorization added to the control of the experiment. Each televised lecture by a graduate student was produced to resemble as nearly as possible a carbon copy of its parent lecture. The same studio floor plan and lighting plan, set, camera positions, director, and crew were used. In every instance, the inexperienced teachers used the same methods and props as their experienced counterparts. If Lecturer No. 1 sat on the edge of a table and quoted Shakespeare and Shaw, so did graduate student No. 1; if Lecturer No. 2 moved to a new location as he started a new development, so did graduate student No. 2; if Lecturer No. 3 enclosed the words, "significant and non-controversial," in a border on the blackboard, so did graduate student No. 3; if Lecturer No. 4 read from his manuscript, so did graduate student No. 4.

Each pair of televised lectures was thus rigidly controlled as to form, content and style, even to the memorization of substantial portions of material. Under these circumstances, one could most accurately describe each graduate student as a "substitute" teacher. Operationally, the original notions of "superior" and "average" (or "inexperienced") teachers have thus been modified. All further references will use the terms, "experienced" and "substitute," when identifying the teachers.

EXPERIMENTAL DESIGN
(*Use of Kinescopes*)

When evaluating two methods of instruction, closed-circuit television and face to face in the classroom, best control may be obtained not only when the same instructor teaches both methods but also when he teaches both methods simultaneously. Kinescoping the televised lectures permitted the instructors to teach one class "in person" while teaching a second class by means of television.[3] Kinescoping the lectures also permitted maximum control, and assurance of the best possible lectures with no extraneous factors. Prior kinescoping of the lecture by the experienced teacher also gave the substitute teacher an opportunity to study a transcript and practice with a model. He could then kinescope his version of the lecture for later use so that he, too, could be seen "in person" by a class while another class viewed the kinescope.

A factorial design could therefore be used in which an experienced teacher taught a lesson by television and face to face in a classroom while, simultaneously, a substitute teacher did likewise. The two factors, teachers and methods, were rotated among the four classrooms for each of four experiments. At some time during the four experiments, students in each classroom were exposed to a classroom lecture by an experienced teacher, a closed-circuit television lecture by another experienced teacher, a classroom lecture by a substitute teacher, and a closed-circuit television lecture by another substitute teacher. From such a design with two factors and four class groups, it was possible to tell which factor was producing what effect and to study the extent of interaction between factors.

Prior kinescoping also made it possible to construct valid tests prior to presentation of the lectures.

EXPERIMENTAL DESIGN
(*Control of Students*)

Considerable control was exerted over the students involved in the experiments, although few were aware of the intentions and none were aware of the extent of control.

Only one class period, 2:00 P.M., was listed by the Registrar for TV-R 8, "Introduction to Television and Radio," the course into which the test lectures were to be incorporated. Four rooms in the Syracuse University Carnegie Library were reserved and technical modifications made in order to present two different televised lectures simultaneously into any two rooms by closed-circuit means. As each student registered for the course, he was given a card from a random pack designating the class room to which he was to report. In this manner, all students were randomly assigned to one of four class sections with control of time, class, and instructor completely in the hands of the administrators.

During the first meeting of the class, via closed-circuit television, the Project Director, in his role as a faculty member, enlisted student help in periodic course evaluation. He explained the increasingly important role of television in education and the contribution Syracuse University, and particularly students of television, could make toward improved use of the medium. Part of a continuous challenge to the faculty of this course, he noted, would be to make the best possible use of the medium. With students' help, the faculty, in effect would become human guinea pigs. In some instances, two or more faculty members might teach the same material; students would assist by letting the faculty know how well they were doing. Students then completed samples of various types of rating scales to be used during the semester.

Student attitudes and expectations were directed toward the experimental nature of the entire course, and experimental lectures were presented in a context designed to misdirect attention from the precise objectives of the experiment.

The general plan of the course—unchanged from the preceding year—was to devote two class meetings per week to presentation of material via closed-circuit television, and a third meeting to student discussion led by the classroom instructor. The course outline distributed to each student listed subjects to be covered during each class meeting, but did not list the lecturers, who included all members of the Television-Radio Department faculty and selected guests. Thus, students had no prior knowledge of each day's lecturer, but attended each class expecting the unexpected.

Once a thirty-minute lecture was completed, students became aware of the special nature of the session, as they were required to answer a quiz consisting of factual questions and to rate the teacher and, where appropriate, teaching by television. After dismissal, many no doubt learned of variations in teaching between classes from discussion with friends. But such information always occurred *ex post facto*.

The course was organized into quarters with an examination at the end of each quarter and a final examination at the end of the course. One experimental lecture was scheduled during each quarter so that special testing could be included logically, yet unobtrusively, as part of each examination. Taken altogether, one may reasonably discount the likelihood of a Hawthorne, or novelty, effect unduly influencing the experimental results.

DEVELOPMENT OF TEST INSTRUMENTS

To measure basic cognitive behavior (information gain), tests consisting of approximately ten multiple-choice questions were administered immediately following each experimental lecture. These items consisted of definitions and recognition of facts that were new to the students. An example from the third lecture:

> An "educational" program may be defined functionally as one whose purpose is significant and ______________.
>
> ☐ 1. non-controversial
> ☐ 2. controversial
> ☐ 3. entertaining
> ☐ 4. non-commercial

Although the answer may need explanation to the layman, the student who heard, accepted, and remembered the lecture could easily select the correct answer.

To measure cognitive behavior at a somewhat higher level (application of principle, interpretation of data), ten multiple-choice questions were inserted in the quarterly multiple-choice examinations that were administered from five to ten days following each experimental lecture. Beyond sheer luck in guessing, the student could not be expected to answer these questions correctly without having both heard and understood the principles discussed by the teacher. An example of application of principle from the first lecture:

> The man likely to be the most corrupt would be a ______________.
>
> ☐ 1. president
> ☐ 2. chancellor
> ☐ 3. prime minister
> ☐ 4. king

To answer this question, the student needed to recall Lord Acton's comment (discussed in the lecture) that "power tends to corrupt, absolute power corrupts absolutely" and then decide which office has greatest power.

An example of a question involving interpretation of data from the fourth lecture:

> In terms of the primary purpose of presenting information, select the alternative *least like* the others.
>
> ☐ 1. newsreel coverage of the visit of a foreign dignitary
> ☐ 2. the lead story on page one of a newspaper
> ☐ 3. a radio broadcast of a political convention
> ☐ 4. a television program explaining the problems of segregation

In order to answer this question correctly, the student needed to understand the definitions of spot news coverage and documentary, and be able to classify each alternative into the proper category.

Five of the "best" questions in terms of content validity, discrimination, and level of difficulty from each of the four experimental lectures were included in the final examination, and the results evaluated on a delayed recall basis.

Lastly, as far as cognitive behavior was concerned, in order to measure general understanding of each subject and its implications, four essay questions—one per experimental lecture—were included as part of the final examination. An elaborate system of scoring and grading by four teachers was devised to rate each student anonymously and objectively on each subject.

Affective behavior was estimated by use of semantic differential scales or Likert-type attitude scales.

In an attempt to measure the effectiveness of the first two lectures in modifying attitudes toward the concepts of "democracy" and "censorship," ten semantic differential scales were constructed for each concept. The instruments included the following scales:

DEMOCRACY

strong ___:___:___:___:___:___:___ weak
dull ___:___:___:___:___:___:___ exciting
dangerous ___:___:___:___:___:___:___ safe
hazy ___:___:___:___:___:___:___ clear
easy ___:___:___:___:___:___:___ difficult
individual ___:___:___:___:___:___:___ state
pleasant ___:___:___:___:___:___:___ unpleasant
immature ___:___:___:___:___:___:___ mature
intimate ___:___:___:___:___:___:___ remote
disapprove ___:___:___:___:___:___:___ approve

CENSORSHIP

brave ___:___:___:___:___:___:___ fearful
hazy ___:___:___:___:___:___:___ clear
necessary ___:___:___:___:___:___:___ unnecessary
easy ___:___:___:___:___:___:___ difficult
restricted ___:___:___:___:___:___:___ free
private ___:___:___:___:___:___:___ public
legal ___:___:___:___:___:___:___ illegal
intimate ___:___:___:___:___:___:___ remote
emotional ___:___:___:___:___:___:___ rational
disapprove ___:___:___:___:___:___:___ approve

The instruments were administered at the second meeting of the course and immediately following the presentation of each lecture.

To estimate changes in affective behavior in modifying attitudes toward a number of subjects discussed by each teacher, "Attitudes Toward Broadcasting" measuring instruments were developed using the Likert five-point "Approve-Disapprove" scale. The first instrument consisted of seventeen attitude statements related to the substance of the first lecture. A second instrument consisted of nine attitude statements related to the substance of the second lecture and ten attitude statements related to the substance of the third lecture. A third instrument consisted of sixteen attitude statements related to the substance of the fourth lecture. Students checked the attitude scales from several days to several weeks prior to the experimental lectures, and again several days after each lecture just prior to taking the quarterly examinations.

A set of thirteen semantic differential scales to reflect attitudes toward the concept, "Teaching by Television," was prepared. The scales were administered to the two classes exposed to teaching by closed-circuit television immediately following each of the experimental lectures. Thus, at some time during the semester, each class rated "Teaching by Television" after having been exposed to an "experienced" teacher and to a "substitute" teacher.

A part of this experiment hypothesized that experienced teachers would rate higher on Osgood's "activity" and "potency" dimensions of meaning than the substitute teachers. Accordingly an instrument, "Today's Teacher," was prepared that included two scales believed to be highly indicative of "activity"—*Exciting-Dull* and *Dynamic-Static*—and three scales believed to be highly indicative of "potency"—*Strong-Weak, Enthusiastic-Not Enthusiastic*, and *Vigorous-Lifeless*. Fifteen additional scales thought to reflect other useful discriminations were added to the instrument.

The arrangement of 7-step scales was as follows:

TODAY'S TEACHER

strong	__:___:_	weak
not enthusiastic	__:___:_	enthusiastic
uncertain	__:___:_	definite
profound	__:___:_	shallow
pleasant to listen to	__:___:_	unpleasant to listen to
nervous	__:___:_	confident
dull	__:___:_	exciting
personal	__:___:_	impersonal
superficial	__:___:_	authoritative
effective	__:___:_	ineffective
natural	__:___:_	affected
hazy	__:___:_	clear
apathetic	__:___:_	inspiring
hard to take notes	__:___:_	easy to take notes
dynamic	__:___:_	static
intimate	__:___:_	remote
lifeless	__:___:_	vigorous
brilliant	__:___:_	mediocre
relaxed	__:___:_	tense
cool	__:___:_	warm

Students rated "Today's Teacher" immediately following each of the experimental lectures as well as after several other lectures during the course.

PRESENTATION OF LECTURES

The four sets of experimental lectures were presented on February 12, March 6, April 13, and April 26, 1960. All tests and evaluation instruments were administered on schedule.

Attendance records were kept in order to be able to remove from later analysis those students who were not present for the experimental lectures. Because the television lectures had been kinescoped, it was possible to recover an occasional absentee student by scheduling a "makeup" closed-circuit presentation in the instances where the student was absent from a television presentation.

Monitors were present in all classrooms during each lecture to record and report student reactions, unusual occurrences, or deviations from the television version of the lectures in the conventional classroom situations. A brief description of the presentations and problems encountered follows.

Experiment No. 1 The experienced teacher was introduced to the class to which he was to lecture—and then proceeded to take forty-five minutes to say in class what he had said in thirty minutes on television! While adding no new material, and permitting no student interruptions with questions or comments, he simply expanded his thoughts and reacted to student stimuli in such a way as to deviate significantly from the previously arranged time schedule.

While this deviation may have resulted in some undefined beneficial effects to students from longer exposure, at least one reverse effect occurred. Students were required to complete a short test and several evaluation forms immediately following the lecture. This they did, but with some reluctance because the class period was nearly over, and they resented being kept overtime to answer questions. Subjective evidence points to the fact that whether students realized it or not, they "downgraded" the professor on the rating scale, "Today's Teacher." Other objective evidence not originally intended as a part of this study is available that the reaction was a temporary one; that at the end of the course students looked back on this lecture as one of the most rewarding experiences of the course. But the immediate reaction which was measured was undoubtedly not the same as would have been obtained had the teacher's performance in the classroom been better controlled. In a second classroom, the substitute teacher presented his lecture in good fashion. In another room, students saw the experienced teacher by closed-circuit television and some were so impressed by this presentation that, at its conclusion, they gave the student sign of approval by snapping their fingers. In the fourth room, students saw the substitute teacher on television.

Experiment No. 2 The second experienced teacher, warned of the earlier classroom problem encountered by the first experienced teacher, visited his classroom determined to stick to the time schedule. While showing improvement and presenting a fine lecture, he still had difficulty, taking thirty-seven minutes instead of thirty. However, students had sufficient time to complete the necessary forms.

In another classroom, the substitute teacher completed his lecture in twenty-six minutes. He was simultaneously seen over closed-circuit television with his kinescoped lecture by a third class without incident.

Meanwhile, an unusual sound problem was occurring in the classroom where the experienced teacher was being seen via kinescope. Workmen in an adjacent room were repairing some electrical circuitry. Although warned not to throw a certain switch, they nevertheless felt obliged to do so on one occasion; so for fifteen seconds, the audio portion of the television signal disappeared. (No important content was missed.) In addition, the drill used by the workmen produced an intermittent high frequency noise that penetrated the walls of the classroom and the ears of the students. This disturbance, lasting ten minutes, made it difficult for students, especially those in the rear of the room, to understand what the teacher was saying. A later rating by the students as to whether the lecturer was "pleasant to listen to" indicated a low mark that was due, surely, to extraneous factors. In interpreting data, this experiment might be expected to result in lower ratings for television instruction than might be expected under normal circumstances.

Experiment No. 3 No unusual occurrences. Both the experienced teacher and his substitute presented their lectures to their classes in approximately thirty minutes; while kinescopes of each were fed simultaneously to the two remaining classrooms.

Experiment No. 4 As in two other instances, the experienced teacher had difficulty meeting the time schedule, taking forty minutes in contrast to his thirty-minute television appearance. Students had no difficulty completing evaluation forms before the end of the period. The unanswered question for the third time is whether the slightly longer exposure to the experienced teacher in the classroom resulted in any discernible change from normal.

The substitute teacher presented his lecture in an excellent manner to his class. The experienced teacher's kinescoped lecture was likewise received without incident in another classroom. Difficulties arose in the presentation of the kinescope of the substitute teacher. A power failure developed in the projector two minutes before the start of the class period. Engineers performed a hasty temporary soldering job and the lecture began five minutes late. Ten minutes later, the projector claw failed to pull the film through the gate. The film lost its loop, caught, and broke. The film was rethreaded at the point of the break and started again. After three minutes the film broke again. Another two-minute delay ensued. For the remaining fifteen minutes, the picture was subject to occasional "flip-flopping," but no more breaks occurred—and the audio portion was excellent. It is surprising that students in this classroom rated "Teaching by Television" as highly as they did at the conclusion of the lecture. Perhaps they sympathized with the production problem. Perhaps the interruptions made them more attentive than usual.

SUMMARY

The preceding discussion of experimental design has detailed the extent to which elaborate controls were attempted throughout all phases of the experiment to assure valid results. But complete control when dealing with the human species is rarely possible. In this instance, minor variations from normal arose with the presentation of some lectures. While the author believes that these variations do not detract in any important respect from subsequent analysis, one must recognize the limitations inherent in generalization when any part of the design is less than perfect.

REFERENCES

1. The graduate students, and the institutions from which they received their degrees, follow in the order of their appearance in the experiment: William B. Smith, Bowling Green University; Don L. Burgess, University of Nebraska; Thomas Gnerek, Buffalo State Teachers College; Leonard Aronoff, Boston University.

2. As will be seen later, students may have related the use of this "visual aid" to reactions toward televised instruction.

3. In terms of picture quality and a sense of immediacy, "live" television or videotape recording would have been preferred. But a teacher obviously could not appear in two places at the same time, and the design would have required two videotape recorders. As none was available, a kinescope recording was the next best, and only, solution. One may assume that any advantages that might accrue to a kinescoped version of a lesson would be at least as great if the presentation were taped.

CHAPTER III

ANALYSIS OF DATA

COMPARISONS OF CLASS GROUPS

The purpose of these experiments was to compare the relative effectiveness of experienced and substitute teachers as they lectured over television and in the classroom. Accordingly, one may assume that students would receive the instruction primarily by verbal means.

Estimates of the degree of verbal facility of students in the four randomized class groups were available from the Verbal Facility section of the College Entrance Examination Board tests required of most students upon entrance to Syracuse University. Scores were available for 75 of the 83 students initially enrolled in the course. In order to determine whether the four classes were drawn from a common population with respect to verbal facility, the analysis of variance was used, as summarized in Table 1. As the observed "F" was less than 1.00, there was no basis for rejecting the hypothesis that the four groups came from a common population, and one may conclude that no class group had any special inherent advantage regarding verbal facility.

TABLE 1

Analysis of Variance of Scores on "Verbal Facility" Section of College Entrance Examination Board Test

Source of Variation	Sum of Squares	d.f.	Mean Square	F-Ratio
Between Groups	1.54	3	.51	.76
Within Groups	47.30	71	.67	
	48.84	74		

Although lecture material content was controlled to exclude any textbook material, it was possible that prior general knowledge of the subject of television might place some students at an advantage on later tests. To estimate prior knowledge of the subject, a multiple-choice test of forty-one items drawn from twenty lecture areas was prepared to constitute an adequate representation of total course content. Students completed the test during the second meeting of the class. In order to determine whether the four classes were drawn from a common population with respect to knowledge of course content, an analysis of variance was used, as summarized in Table 2. As the observed "F" was small, there was no basis for rejecting the hypothesis that the

TABLE 2

Analysis of Variance of Scores on 41-Item Multiple-Choice Test of General Knowledge of Television

Source of Variation	Sum of Squares	d.f.	Mean Square	F-Ratio
Between Groups	39.12	3	13.04	.69
Within Groups	1490.87	79	18.87	
	1529.99	82		

four groups came from a common population, and one may conclude on the basis of this evidence that no class group had any special advantage in answering subsequent tests due to prior knowledge of course content.

As comparative data shown in Table 1 and Table 2 were not available prior to the first experimental lecture, an eight-item multiple-choice pre-test was administered to all students prior to the first experimental lecture to ascertain the extent of knowledge of material to be covered specifically in that lecture. The mean percentage scores for the four class groups on the quiz were: 44%, 46%, 48%, and 44%. In order to determine whether the four class groups were drawn from a common population with respect to information to be presented in the first experimental lecture, an analysis of variance was used, as shown in Table 3. As the obtained "F" was quite small, there was no basis for rejecting the hypothesis that the four groups came from a common population, and one may conclude on the basis of this evidence that no class group possessed knowledge of "freedom and responsibility in broadcasting" to a significantly greater degree than any other class group.

TABLE 3

Analysis of Variance of Scores on 8-Item Multiple-Choice Test, Experiment 1

Source of Variation	Sum of Squares	d.f.	Mean Square	F-Ratio
Between Groups	2.34	3	.78	.40
Within Groups	152.36	78	1.95	
	154.70	81		

As a result of the observed similarities among the class groups, covariance techniques to account for differences due to verbal facility or knowledge of course content were deemed to be unnecessary in future calculations.

EDUCATIONAL OBJECTIVES— INFORMATION GAIN

Hypotheses 1 and 2 stated that students would perform equally on certain measures of cognitive behavior (information gain) whether taught by means of television or in classrooms and whether taught by experienced or substitute teachers.[1]

Extent of information gain for Experiment 1, "Freedom and Responsibility in Broadcasting," was determined by readministering the same eight-item test of factual information that had been used as a pre-test immediately after the lecture presentations. Table 4 shows the scores for each question made by all students two days before, and immediately after, the lecture.

It will first be noted that a significant amount of learning occurred. The average score for all students prior to the lecture was less than 50 per cent; but greater than 75 per cent after the lecture. Significant improvement was obtained for six of the eight questions.

TABLE 4

Pre-Test and Post-Test Scores on Information Gain Test, Experiment 1 (N = 82)

Test Question	Before	After
1	21	76*
2	43	74*
3	55	71*
4	14	76*
5	25	42*
6	62	69
7	45	45
8	34	47*
Average	37.375	62.50*
% Correct	45.6%	76.2%

*Significant Gain at .05 level of confidence[1]

Difference scores were determined for each student, and are summarized in Table 5. In order to determine whether learning was related to teacher or instructional method, an analysis of variance of the difference scores was computed, as shown in Table 6.[2]

TABLE 5

Mean Scores on 8-Item Factual Information Test Administered Before and After Experiment 1

Category	Before	After	Information Gain
Teachers:			
Experienced	3.72	5.88	2.16
Substitute	3.56	6.29	2.73
Methods:			
Television	3.67	6.13	2.46
Classroom	3.63	6.02	2.39
Interaction:			
Exp-TV	3.87	5.91	2.04
Exp-Cl	3.55	5.85	2.30
Sub-TV	3.42	6.16	2.74
Sub-Cl	3.70	6.42	2.72

TABLE 6

Analysis of Variance of Difference Scores Indicating Information Gain, Experiment 1

Source of Variation	Sum of Squares	d.f.	Mean Square	F-Ratio
Between Teachers	7.25	1	7.25	2.77
Between Methods	.60	1	.60	.23
Interaction	.20	1	.20	.08
Residual	202.00	77	2.62	

None of the obtained "Fs" is sufficiently large to reject the hypotheses of no differences between teachers or methods. One may conclude, on the basis of this experiment, that students learn facts equally from experienced teachers and substitute teachers and from television and classroom instruction.

At the conclusion of the second experimental lecture discussing "Censorship in the Mass Arts," students completed a twelve-item test of factual material covered by the lecturers. The analysis of variance test for the scores is shown in Table 7.

TABLE 7

Analysis of Variance of Scores on 12-Item Information Gain Test, Experiment 2

Source of Variation	Sum of Squares	d.f.	Mean Square	F-Ratio
Between Teachers	.06	1	.06	.01
Between Methods	33.52	1	33.52	7.83*
Interaction	2.72	1	2.72	.64
Residual	338.08	79	4.28	

Means for Methods: Classroom—8.14; Television—6.90

One must reject the hypothesis of no difference between methods and conclude that students exposed to this lecture on censorship learned significantly more factual information when taught face to face in the classroom than when taught over television.[4] However, students learned equally from experienced and substitute teachers.

A ten-item multiple-choice test was administered to students after the third experimental lecture dealing with the subject, "What is Great Television?" The analysis of variance test for the scores is shown in Table 8.

TABLE 8

Analysis of Variance of Scores on 10-Item Information Gain Test, Experiment 3

Source of Variation	Sum of Squares	d.f.	Mean Square	F-Ratio
Between Teachers	.09	1	.19	.10
Between Methods	1.71	1	1.71	.89
Interaction	10.07	1	10.07	5.22*
Residual	140.89	73	1.93	

Means for Teachers and Methods

	Experienced	Substitute
Television	7.19	6.55
Classroom	6.77	7.58

The obtained "Fs" are inconsequential for teachers and methods and indicate no basis to reject the hypotheses of no differences. One concludes, on the basis of this experiment, that students learn facts equally from experienced and substitute teachers and from television and classroom instruction.

However, a significant interaction "F" is obtained. Students exposed to the substitute teacher in the classroom did substantially better than those students in all other situations.

Lastly, a ten-item multiple-choice test was administered to students after the fourth experimental lecture dealing with the subject, "Seeing the Best in American Television." The analysis of variance test for the scores is shown in Table 9.

The obtained "Fs" are inconsequential. One fails to reject the hypotheses of no differences and may conclude, on the basis of this experiment, that students learn facts equally from experienced teachers and substitute teachers and from television and classroom instruction.

TABLE 9

Analysis of Variance of Scores on 10-Item Information Gain Test, Experiment 4

Source of Variation	Sum of Squares	d.f.	Mean Square	F-Ratio
Between Teachers	.19	1	.19	.12
Between Methods	.19	1	.19	.12
Interaction	.02	1	.02	.01
Residual	118.73	74	1.60	

Table 10 summarizes the class group scores in percentage terms for the four experiments. Experienced teachers and their substitutes do equally well in all experiments. In one of four experiments students exposed to classroom instruction exceed the performance of students exposed to television instruction; in all others, television is as effective as classroom instruction. One significant interaction favoring a substitute in the classroom was noted.

TABLE 10

Summary of Information Gain Scores for Four Experiments, %

Category	1	2	3	4
Teachers:				
Experienced	73.5	62.8	69.5	75.2
Substitute	78.6	62.9	70.5	76.2
Methods:				
Television	75.0	57.5	68.4	75.5
Classroom	76.5	68.0*	71.4	76.2

On the basis of these tests, the following conclusions were made:

H_1—Students will perform equally on certain measures of cognitive behavior (information gain) whether taught by means of television or in the classroom. *FAIL TO REJECT*

Conclusion: Television and Classroom exposure are generally equally effective when presenting information verbally.

H_2—Students will perform equally on certain measures of cognitive behavior (information gain) whether taught by superior or average teachers. *FAIL TO REJECT*

Conclusion: Experienced or substitute teachers are equally effective in a lecture situation if the educational goal is to present information.

EDUCATIONAL OBJECTIVES— CRITICAL THINKING

Hypotheses 3 and 4 stated that students would perform equally on certain measures of cognitive behavior (critical thinking) whether taught by means of television or in classrooms, but would perform better when taught by experienced rather than substitute teachers.

To test the hypotheses, particularly with respect to the area of critical thinking involving application of principles and interpretation of data, multiple-choice questions were prepared for inclusion in the four examinations administered at intervals during the course.[5] As explained earlier, these tests occurred from five to ten days after each experimental lecture. Table 11 shows the values of "F" resulting from an analysis of variance computed for each experiment, and the mean scores obtained for each experiment. No significant "Fs" were obtained from these experiments. If one examines *tendencies*, then one notes that, in three of four experiments, the experienced teacher does slightly, although not significantly, better than the substitute teacher; while the reverse holds true in the fourth case. In two experiments, students exposed to classroom presentations did slightly, although not significantly, better than students exposed to television. It may be important to observe, at this point, that these two experiments were the ones involving technical difficulties with the television transmission described earlier.

TABLE 11

Summary of F-Ratios and Mean Scores from Critical Thinking Tests Administered After 4 Experimental Lectures

	1	2	3	4
F-Ratios:				
Between Teachers	1.85	.61	2.65	1.04
Between Methods	.16	1.42	.00	1.63
Interaction	1.45	.48	1.22	1.50
Mean Scores:				
Teachers:				
Experienced	7.14	7.08	5.24	6.56
Substitute	6.67	6.80	4.64	6.74
Methods:				
Television	6.98	6.66	4.92	6.42
Classroom	6.85	7.16	4.95	6.92

Based on content validity, five questions dealing with application of principle and interpretation of data were selected from each lecture for inclusion on the final examination. Table 12 shows the values of "F" resulting from an analysis of variance computed for each experiment.

TABLE 12

Analysis of Variance Scores (F-Ratios) of Four Delayed Tests of Critical Thinking Administered During Final Examination

	1	2	3	4
Between Teachers	.20	3.78*	.48	1.44
Between Methods	.20	1.51	1.66	.02
Interaction	7.85*	.25	.48	2.67

Means for Teachers (Exper. 2):	
Experienced	4.22
Substitute	3.86

Means for Teachers and Methods (Exper. 1):	Exp	Sub
TV	3.83	4.35
Class	4.56	3.85

There is a tendency (P = .10) for students exposed to the experienced teacher in Experiment 2 to do better on the test of critical thinking ability at the end of the course than those exposed to the substitute teacher. The interaction term for Experiment 1 is difficult to interpret.

As a matter of logic, reflection suggested that these data in Table 12 should be eliminated. They have been included only for the sake of completeness. It will be recalled that the experimental lectures were included as part of a regular ongoing course and treated as such. Accordingly, after each quarterly examination, tests were returned for a brief time in class to each student for a discussion period. The student had the opportunity to study his errors and file the corrections in his memory for future reference. Thus, the ability of the student to answer the same questions correctly at the end of the semester may be related to his ability to memorize answers, and the extent to which the classroom instructor covered the material in review and permitted discussion of same. In other words, the design had now allowed extraneous factors to enter, and results therefore may be related only obtusely to the method and teacher at this stage. Accordingly, additional analyses of variance were performed on student results of the same questions pertaining to critical thinking ability described above, but which had been administered shortly after exposure to the lectures but prior to discussion periods. The results are shown in Table 13. It is believed that, because of the nature of the questions, these results have greater validity than those presented earlier in Table 11.

TABLE 13

Analysis of Variance Scores (F-Ratios) and Mean Scores of Critical Thinking Tests Administered after 4 Experimental Lectures

	1	2	3	4	Composite
F-Ratios:					
Between Teachers	4.58*	4.29*	2.03	.35	4.17*
Between Methods	1.06	.02	.85	.53	.02
Interaction	.00	.61	.76	.48	2.44
Means: Teachers					
Experienced	3.66	3.85	3.65	2.80	3.43
Substitute	3.21	3.40	3.25	2.60	3.17
Means: Methods					
Television	3.56	3.62	3.57	2.58	3.30
Classroom	3.33	3.60	3.33	2.82	3.29

In all experiments, the results of the tests requiring students to apply principles or interpret data favor students exposed to the experienced teacher, and in two of four experiments (1 & 2) the results are statistically significant. No differences of any consequence are noted when methods are compared.

Table 13 also shows results of a "composite" test obtained by combining five test items from each of four tests for all students. (During the course of the experiments, 78 students were exposed to an experienced teacher on television, 81 exposed to an experienced teacher in the classroom, 83 exposed to a substitute teacher on television, and 81 exposed to a substitute teacher in the classroom.) The combined test confirms the conclusions indicated above.

As an additional procedure to estimate the effectiveness of instructors and methods in teaching critical thinking, four essay questions—one per experimental lecture—were incorporated as part of the final examination for the course.[6] The essay questions were planned to measure general understanding of each subject and its implications, and to determine the ability of the student to organize his thoughts within new frames of reference.

Prior to grading, each student was arbitrarily assigned a secret number. All answers were then typed to avoid any potential grading bias occasioned by poor penmanship. Although of the essay type, an objective grading procedure was devised with points being granted for inclusion of specific ideas in the answers. The elaborate scoring scheme was given to four graders for their guidance as they scored each student independently. Thus, graders scored all papers from an objective set of criteria for each question, and with no knowledge of the students' identities. The four independent scores for each question were then averaged to obtain the final score used in analysis.

A summary of the F-Ratios obtained by an analysis of variance is shown in Table 14. For the

TABLE 14

Analysis of Variance Scores (F-Ratios) and Mean Scores of Four Essay Questions Reflecting Critical Thinking Administered During Final Examination

	1	2	3	4	Composite
F-Ratios:					
Between Teachers	.03	1.07	.55	3.68*—	1.03
Between Methods	1.61	.50	.71	1.19	.36
Interaction	1.26	.77	1.10	.94	.99
Means: Teachers					
Experienced	63.8	93.3	13.6	67.8	59.7
Substitute	64.7	83.6	13.1	55.2	55.2
Means: Methods					
Television	68.0	91.9	13.1	57.5	58.7
Classroom	60.0	84.8	13.6	65.5	56.1

essay questions, students exposed to the experienced teacher in Experiment 4 tended to do better than those exposed to the substitute teacher. This difference, although small, is worth mentioning because it is possible that a difference favoring the experienced teacher has been tapped by use of the essay question form which was not tapped by the multiple-choice form of question. No other significant differences were obtained, although the experienced teacher was favored in two of the three remaining experiments.

Moderate fluctuations relating to the instructional method are observed to favor television slightly in two experiments and to favor the classroom slightly in the other two experiments. However, none of the fluctuations approaches significance and neither method appears to have any special consistent advantage.

As previously, composite scores were determined for the 78 students exposed to an experienced teacher on television, 77 students exposed to an experienced teacher in the classroom, and 79 students exposed to a substitute teacher, both on television and in the classroom. The results of an analysis of variance are also shown in Table 14. The combined test confirms the preceding conclusion of a slight, although non-significant, difference favoring the experienced teacher.[7]

On the basis of the preceding tests involving multiple-choice questions designed to measure ability to apply principles and to interpret data and essay questions designed to measure ability to organize subject matter and to integrate knowledge, the following conclusions were made:

> H_3—Students will perform equally on certain measures of cognitive behavior (critical thinking) whether taught by means of television or in a classroom. *FAIL TO REJECT*
>
> *Conclusion:* Television and Classroom instruction are equally effective for teaching students to apply principles, interpret data, and integrate knowledge.
>
> H_4—Students will perform equally on certain measures of cognitive behavior (critical thinking) whether taught by superior or average teachers. *REJECT*
>
> *Conclusion:* Experienced teachers are generally more effective than substitute teachers in teaching students to apply principles, interpret data, and integrate knowledge, even when both use approximately the same words in the teaching process.[8]

EDUCATIONAL OBJECTIVES—AFFECTIVE BEHAVIOR

Hypotheses 5 and 6 suggested that students would achieve a higher level of performance on measures of affective behavior when taught in classrooms rather than by television, and by superior teachers rather than average teachers.

The first instruments devised to measure affective behavior consisted of three "Attitudes Toward Broadcasting" scoring schedules. The first schedule contained seventeen opinion statements relating to the substance of the first experimental lecture.[9] Students selected one of five positions, Strongly Agree, tend to agree, undecided, tend to disagree, or Strongly Disagree for each statement. Students were then scored on the basis of 5 points for a "correct" answer, 4 points for the next best, and on to 1 point for an incorrect answer. This attitude scale was administered on February 10, 1960, two days prior to the lecture, and repeated on February 19, one week after the lecture.

The second "Attitudes Toward Broadcasting" scoring schedule consisted of nine opinion statements relating to the substance of the second experimental lecture, and ten opinion statements relating to the substance of the third experimental lecture.[10] Students scored this schedule on February 26, 1960. They rescored the first part of the schedule on March 10, four days after the second lecture. They rescored the second half of the schedule on April 18, five days after the third lecture.

The third "Attitudes Toward Broadcasting" scoring schedule consisted of sixteen opinion statements relating to the substance of the fourth experimental lecture.[11] The schedule was administered on April 22, 1960, four days prior to the lecture, and readministered on May 9, 1960, thirteen days after the lecture.

Results of the initial administration of each attitude scoring schedule are shown in Table 15. The analysis of variance indicated no substantial attitudinal differences existed among the class groups for any of the subjects covered by the lectures prior to their presentation.

As students rescored the same test instruments after exposure to the lectures, the "t"-test for correlated means was used to test for significant improvements in attitudinal positions after the lectures. Table 16 shows the results for each test.

TABLE 15

Analysis of Variance of Total Scores on Attitude Schedules Administered Prior to Lectures

Lecture	Source of Variation	Sum of Squares	d.f.	Mean Square	F-Ratio
1	Between Groups	48.07	3	16.02	.27
(17 Scales)	Within Groups	4537.48	77	58.93	
		4585.55	80		
2	Between Groups	40.27	3	13.42	1.49
(9 Scales)	Within Groups	693.73	77	9.01	
		754.00	80		
3	Between Groups	66.70	3	22.23	1.65
(10 Scales)	Within Groups	954.30	71	13.44	
		1039.53	74		
4	Between Groups	37.50	3	12.50	.40
(16 Scales)	Within Groups	2311.72	75	30.82	
		2349.22	78		

The total class improved in group attitudes toward each subject. While one may rejoice at this favorable indication of total effect, the net result would appear to be statistically, but not necessarily socially, significant. The rather small, though real, gains were doubtless disappointing to the teachers.

TABLE 16

"t" for Means of Total Student Attitude Scores Before and After Exposure to Four Experimental Lectures

Lecture	Condition	N	Mean	Difference in Means	x^2	"t"
1	Before	81	59.23	1.15	4715.69	1.35
	After	81	60.38			
2	Before	80	28.57	2.59	2312.44	4.27*
	After	80	31.16			
3	Before	76	37.03	1.80	1982.73	3.04*
	After	76	38.83			
4	Before	79	58.49	4.44	5666.17	4.62*
	After	79	62.93			

TABLE 17

Summary of Analysis of Variance of Attitude Change Scores (F-Ratios) on "Attitudes Toward Broadcasting" Schedules Related to Four Lectures

	1	2	3	4
Between Teachers	.01	2.01	.15	.00
Between Methods	.05	.85	2.15	.00
Interaction	4.70*	.03	1.12	2.71

Means for Teachers and Methods (Experiment 1)

	Experienced	Substitute
Television	.04	2.16
Classroom	2.25	.35

Inasmuch as the instruction was being presented under varying conditions, it was possible that teachers or methods had a dominant effect on attitudinal changes. Accordingly an analysis of variance was computed for the *changes* in total attitude scores for members of each class group. The results are shown in Table 17. Inspection of the table indicates that neither teachers nor methods appear to have any special advantage in changing student attitudes. One significant interaction is noted in Experiment 1. One may conjecture whether the interaction resulted from lower-than-normal attitudinal changes shown by students exposed to the experienced teacher on television and to the substitute teacher in the classroom, or to higher-than-normal changes by students exposed to the substitute teacher on television and the experienced teacher in the classroom.

The attitude scale for Experiment 1 included twelve statements (in groups of three each) relating to four different concepts discussed by the teacher. Each was analyzed separately. The first concept related to the "responsibility of the individual to broadcasting," and the following attitude statements applied to this concept:

4. The average person has no influence in television programming.
9. The greatest enemy of broadcasting is indifference on the part of the listener.
19. As a group, the American people deserve whatever programming they get.

Results in Table 18 show that the class as a whole showed significant improvement on the combination of these three attitude statements.

TABLE 18

"t" for Means of Student Attitude Scores on "Individuals' Responsibility" Before and After Lecture 1

Condition	N	Mean	Difference in Means	x^2	"t"
Before Lecture	80	9.825	1.10	443.1	4.15*
After Lecture	80	10.925			

After the lecture, students believed that the individual had a greater responsibility for television programming than before the lecture.

The second concept related to the "obligations of broadcasters" and included the following statements:

8. The mass media should be careful to report both facts and opinion.
16. Television is primarily for relaxing; we can get information from the other mass media.
20. Whatever interests the public is in the public interest.

The third concept related to "control of the abuse of power" and included the following statements:

11. Broadcasters who present only popular music programs should be forced by the government to improve their schedules.
14. A broadcaster should not be allowed to use his facilities as he sees fit.
15. When a person lives as a member of a free society, he need not be responsible to anyone.

The fourth concept concerned "evils of the exploitation of people" and included the following statements:

5. It is deceitful to use recorded or canned laughter on television programs.
12. Maybe some quiz shows *were* rigged, but that's show-business.
17. If guests on an interview program such as *Person to Person* are rehearsed before the program, the public should be informed of the fact.

Table 19 summarizes the analysis of the four concepts. With the exception of the first concept previously described, no significant attitudinal change occurs with the three remaining concepts. Also, neither teachers nor methods seem to affect appreciably student attitudes toward any of the four concepts.

If one looks long enough and hard enough, one can probably always find some deviations from normal and such may be the case with the following data from certain of the attitude scales. Table 20 shows the various combinations of attitude statements that reveal significant differences favoring teachers or methods. The problem

TABLE 19

Summary of "t"-tests and Analysis of Variance Scores (F-Ratios) for Four Concepts Presented During Experiment 1

	Individuals' Responsibility	Broadcasters' Obligations	Abuse of Power	Exploitation of People
Means:				
Before Lectures	9.825	11.28	9.40	9.88
After Lectures	10.925	11.41	9.63	9.70
Difference	1.10	.13	.23	−.18
"t"	4.15*	.44	.82	.43
F-Ratios:				
Between Teachers	1.67	.81	.34	.90
Between Methods	.45	.06	1.26	.05
Interaction	4.83*	.39	.08	.05

TABLE 20

Summary of Miscellaneous Combinations of Statements of Attitude Change in Three Experimental Lectures

Lecture	Combination of Statements	F-Ratios	Significantly Favors: (Means)
2	5, 9	5.66*	Experienced Teacher (1.57 vs. .53)
2	2, 7, 8	15.51*	Substitute Teacher (2.00 vs. .27)
3	14, 16	10.16*	Experienced Teacher (.70 vs. –.57)
3	13, 19	3.70*–	Substitute Teacher (1.15 vs. .19)
3	18, 20	3.80*–	Classroom (.98 vs. .34)
4	1, 3, 10, 12, 13, 15, 16	3.78*–	Experienced Teacher (3.71 vs. 2.05)
4	2, 5, 6, 11	6.01*	Substitute Teacher (1.78 vs. .48)

connected with the seven combinations of two or more statements is that, while the combinations have been developed that have statistical significance, none make psychological sense. If one were to determine the considerable number of permutations and combinations possible from these scales, then perhaps these few represent only random deviations after all. They cannot immediately be explained otherwise.

The semantic differential technique was also used in an attempt to measure affective behavior for the first two experimental lectures. As described earlier, ten scales were constructed to measure changes in attitude toward the concepts of "democracy" (Lecture 1) and "censorship" (Lecture 2). Both instruments were administered at the second meeting of the course; and each was readministered immediately after its respective lecture. Table 21 shows the extent to which students changed their positions on ten attitude scales connoting some aspect of democracy after being exposed to the lecture.[12]

TABLE 21

"γ" for Means of Scores on Ten Bipolar Scales Relating to "Democracy" Before and After Experiment 1 (N = 81)

Scale	Means Before	Means After	Difference in Means	χ^2	"γ"
Strong—Weak	6.17	5.92	–.25	131.14	1.76
Exciting—Dull	5.65	5.61	–.04	232.46	.21
Dangerous—Safe	3.01	5.03	2.02	478.94	7.43*
Clear—Hazy	4.92	4.73	–.19	413.58	.75
Difficult—Easy	5.80	5.72	–.08	301.84	.37
Individual—State	5.40	6.15	.75	352.60	3.22*
Pleasant—Unpleasant	6.05	5.75	–.30	223.86	1.61
Mature—Immature	6.02	6.01	–.01	195.95	.06
Intimate—Remote	5.02	5.52	.50	344.21	2.17*
Approve—Disapprove	6.72	6.60	–.12	84.03	1.05

In the rather special context in which democracy was described, significant opinion changes occurred on three scales. On an *Individual-State* scale, students sensed democracy as relating to the individual to a greater extent after the lecture than before. This positive change agrees favorably with the significant change that occurred with the combination of three attitude statements relating to responsibility of the individual reported earlier. Students also sensed democracy as more *Intimate* (as opposed to *Remote*) after exposure to the lecture. This desirable change is probably related to the former scale. Students felt they were, or should be, more closely associated with the concept. The greatest change occurred with the *Dangerous-Safe* scale, where opinion reversed from the negative to the positive position; that is, from *Safe* to *Dangerous*. No other scales showed perceptible changes. The lecture stressed the presumption that the success of a democratic form of government was related to the strength of the individual members comprising the democracy; that reliance on individuals placed this form in the most tenuous of positions; that, in fact, democracy was the most dangerous of all forms of government depending, as it does, on the extent of citizen knowledge, concern, and participation. It was therefore particularly gratifying to observe that student reaction to the three scales of greatest pertinence, *Individual-State*, *Intimate-Remote*, and *Dangerous-Safe*, showed significant improvement.

Inasmuch as students exhibited attitude changes on only three adjectival bipolar scales after exposure to the lecture, significant changes attributable to teachers or methods might be expected to be few in number. Such is the case, as seen by examining the results in Table 22, where only one main effect due to teachers, one main effect due to methods, and one interaction effect was found when an analysis of variance was computed for each scale.

TABLE 22
Summary of Analysis of Variance of Difference Scores (F-Ratios) on Ten Bipolar Scales Relating to "Democracy," Experiment 1 (N = 81)

Scale	F-Ratios Between Teachers	Between Methods	Interaction
Strong—Weak	1.41	.93	1.47
Exciting—Dull	.52	1.81	1.36
Dangerous—Safe	2.96	.93	4.49*
Clear—Hazy	.74	2.86	1.44
Difficult—Easy	.00	.37	.24
Individual—State	5.49*	.14	2.89
Pleasant—Unpleasant	.00	1.44	.08
Mature—Immature	.04	4.93*	.81
Intimate—Remote	.63	.37	.54
Approve—Disapprove	.46	.11	.46

Means, Teachers: (Individual-State)

Experienced	.33
Substitute	1.24

Means, Methods: (Mature-Immature)

Television	.26
Classroom	—.43

Means, Teachers & Methods: (Dangerous-Safe)

	Experienced	Substitute
Television	2.34	2.16
Classroom	.93	2.68

Students rated democracy as significantly more *Individual* (as opposed to *State*) after exposure to the substitute teacher than to the experienced teacher. One may conjecture that students recognized the substitute teacher as one with whom they could identify more readily than the older experienced teacher. They may therefore have been more susceptible to the younger teacher's suggestions and accepted his plea for individual responsibility. We may learn from our elders but *follow* our peers.

Students also rated democracy as more *Mature* after exposure to the television instruction than to the classroom instruction. Part of the significant F-ratio is caused by students actually rating democracy as *less mature* after exposure to the classroom instruction. The television presentation appeared to accomplish its objective for this scale whereas the classroom presentations gave students a "wrong" impression. Misunderstanding of the material occurred in the classroom and not on television.

The interaction observed on the *Dangerous-Safe* scale is provocative, but easily explained. All class groups rated the scale in relation to the concept in a significantly more favorable manner after the lecture. Further, these classes improved significantly over that class taught by the experienced teacher in the classroom.

The transcript of the lecture revealed that, as the experienced teacher was discussing the challenges inherent in a democratic form of government, he noted at one point: "Democracy is the most *dangerous* form of government ever devised by man. . . ." These words were also used by the substitute teacher on television and in class. But when the experienced teacher lectured to his class, he changed one word as follows: "Democracy is the most *hazardous* form of government ever devised by man. . . ." Students discriminated between the two connotations of democracy and accepted "hazardous" as less dangerous than "dangerous." 19

Table 23 shows the extent to which students changed their positions on ten semantic scales related to their conception of censorship after being exposed to the lecture concerned with this subject. Three scales provide changes in a favorable direction. There is a tendency (P = .10) for students to think of censorship as even more *Difficult* to accomplish effectively (as opposed

TABLE 23
"t" for Means of Scores on Ten Bipolar Scales Relating to "Censorship" Before and After Experiment 2 (N = 80)

Scale	*Means* Before	After	Difference in *Means*	s^2	"t"
Fearful—Brave	4.57	4.22	−.35	362.88	1.48
Hazy—Clear	4.46	4.36	−.10	455.72	.38
Necessary—Unnecessary	4.42	4.80	.38	398.72	1.25
Difficult—Easy	5.77	6.14	.37	270.05	1.81*—
Restricted—Free	5.12	5.12	.00	382.54	.00
Public—Private	4.62	5.41	.79	473.70	2.92*
Legal—Illegal	4.78	5.25	.47	444.06	1.80*—
Intimate—Remote	4.35	4.72	.37	426.79	1.44
Rational—Emotional	3.69	3.70	.01	636.17	.03
Approve—Disapprove	3.81	4.30	.49	698.11	1.49

to *Easy*) than they thought before the lecture. Students tended to accept to a greater degree the idea that censorship was *Legal*. And they accepted in significant measure the idea that the problem of censorship was essentially a *Public* (rather than *Private*) matter.

It should be noted that at least three scales possessed a great deal of ambiguity, reflected in the large variance estimate, s^2, as indeed, the concept of censorship itself possessed. One could argue that censorship should be *Unnecessary* in theory, but is *Necessary* in practice because of the foibles of man. One might wish that discussions and actions relating to censorship would be *Rational* in character, but suspect that most are *Emotional*. And one might *Approve* of censorship in principle for certain aspects of society, but *Disapprove* of censorship as practiced.

TABLE 24
Summary of Analysis of Variance of Difference Scores (F-Ratios) on Ten Bipolar Scales Relating to "Censorship," Experiment 2 (N = 80)

Scale	Between Teachers	*F-Ratios* Between *Methods*	Interaction
Fearful—Brave	.27	.27	.18
Hazy—Clear	.30	.00	2.26
Necessary—Unnecessary	.74	.26	.15
Difficult—Easy	.01	1.59	.06
Restricted—Free	.03	.48	2.02
Public—Private	.00	.70	.17
Legal—Illegal	2.42	2.81	1.31
Intimate—Remote	.03	.05	1.38
Rational—Emotional	.59	.00	.29
Approve—Disapprove	1.92	.03	4.83*

Means, Teachers & *Methods*: (Approve-Disapprove)

	Experienced	Substitute
Television	.40	.79
Classroom	1.37	−.35

Table 24 shows the results of an analysis of variance computed for the ten scales connoting some aspect of censorship. Significantly, no important differences were found to relate either to teachers or to methods. One significant interaction occurred. Students exposed to the substitute teacher in the classroom decreased in their approval of censorship; whereas students exposed to the lecture under all other conditions showed greater approval of the concept.

During the administration of the two conceptual instruments, three instances have thus been noted, one involving an experienced teacher, one involving a substitute teacher, and one involving both, in which students shifted negatively along a semantic scale after exposure to classroom instruction, but shifted positively under the remaining conditions. No instances of the reverse case were found in which television instruction was involved with a negative shift.

On the basis of the preceding five-point attitude scales administered before and after each experimental lecture and semantic differential scales administered before and after the first two lectures, the following conclusions were made:

H—Students exposed to instruction on television will achieve an equal level of performance on certain measures of affective behavior (attitudes, values, discriminations) as students exposed to classroom instruction. *FAIL TO REJECT*

Conclusion: Television instruction is as effective as classroom instruction in modifying attitudes and values. Prior television recording has the added advantage, if supplemented by pretesting, of assuring consistent accomplishment of goals.

H—Students will achieve the same level of performance on certain measures of affective behavior (attitudes, values, discriminations) whether taught by superior or average teachers. *FAIL TO REJECT*

Conclusion: The experienced teachers and the substitute teachers appear to be equally effective in achieving similar levels of affective behavior. Rather extensive attitudinal and other scales failed to reveal important differences in this area. We frankly hoped to find advantages favoring the experienced teacher; but could not in these experiments.

PERSONAL ATTRIBUTES OF TEACHERS

A second major purpose of these experiments was to investigate a number of personal attributes, or traits, of teachers identifiable by students. Even though definition be foggy, most people believe that the "personality" of a teacher is important to the educational process. All other things being equal, the person with the "best" personality is assumed to be the best teacher.

After each lecture, students rated the teachers on semantic differential scales developed to describe personal traits that students might sense from observing the teachers. Although pioneering studies in this area have identified at least three dimensions of meaning, two were examined in this phase of the study, "activity" and "potency." [14] Two scales were selected that were believed to be highly loaded on the "activity" dimension: *Exciting—Dull* and *Dynamic—Static*. Similarly, three scales were selected that were believed to be highly loaded on the "potency" dimension: *Strong—Weak, Enthusiastic—Not Enthusiastic, and Vigorous—Lifeless.*

TABLE 25

Summary of Analysis of Variance of Scores (F-Ratios) for Two "Activity" Scales for Concept, "Today's Teacher," 4 Experiments

	1	2	3	4
F-Ratios:				
Between Teachers	.52	7.34*	5.00*	7.51*
Between Methods	.48	17.75*	.45	17.54*
Interaction	4.43*	.08	.99	.06
Means for Teachers:				
Experienced	(9.88)	10.03	10.53	10.55
Substitute	(9.46)	8.86	9.66	8.70
Means for Methods:				
Television	(9.54)	8.43	(10.11)	8.38
Classroom	(9.87)	10.33	(10.09)	11.03
Interaction:				
Exp-TV	10.22	(9.00)	(10.81)	(9.37)
Exp-Class	9.50	(11.11)	(10.32)	(11.74)
Sub-TV	8.75	(7.85)	(9.55)	(7.57)
Sub-Class	10.26	(9.71)	(9.37)	(10.24)

( )—included for information only

Table 25 shows the results of four analyses of variance of the activity ratings ascribed by students to teachers under differing instructional situations attendant to the four experimental lectures.

Students' ratings of teacher activity are higher for experienced teachers in all experiments and significantly higher in three experiments. Had more favorable evaluation conditions been available for the experienced teacher in the classroom in the first experiment,[15] it is possible that significant differences would have been obtained here also.

In terms of instructional method, the classroom presentation was rated more *Active* in three experiments and significantly more *Active* in two experiments.

Significant interaction was found for Experiment 1 where the experienced teacher in the classroom was rated lower than expected on activity, perhaps because of factors discussed earlier.

Table 26 shows the results of the four analyses of variance of the potency ratings ascribed by students to teachers under differing instructional situations for the four experimental lectures. In all experiments, student ratings of teacher potency are higher for experienced teachers than for substitute teachers, and significantly higher in two experiments.

The findings relating to instructional methods are in conflict. In Experiments 2 and 4, students rate the classroom instruction as significantly more *Potent*. In Experiments 1 and 3, students rate the television instruction as slightly, although not significantly, more *Potent*.

The findings for Experiment 1 may again be clouded by a significant interaction in which the experienced teacher was rated somewhat lower than expected after his lengthy classroom appearance.

On the basis of these ratings to investigate two attributes of teachers observable to students in classroom and on television, the following conclusions were made:

H—Students will perceive superior and average teachers as equally *Active*. REJECT
Conclusion: Students perceive an experienced teacher as more *Active* than a substitute teacher.

H—Students will perceive superior and average teachers as equally *Potent*. REJECT
Conclusion: Students perceive an experienced teacher as more *Potent* than a substitute teacher.

H—Students perceive teachers as equally *Active* whether in the classroom or on television. REJECT

Conclusion: Students generally perceive a teacher in the classroom as more Active than a teacher on television.[14]

H—Students perceive teachers as equally *Potent* in the classroom and on television. *REJECT*

Conclusion: Students generally perceive a teacher in the classroom as more *Potent* than a teacher on television, although it is possible that a teacher can be as *Potent* on television.

TABLE 26

Summary of Analysis of Variance of Scores (F-Ratios) for Three "Potency" Scales for Concept, "Today's Teacher," 4 Experiments

	1	2	3	4
F-Ratios:				
Between Teachers	1.76	5.68*	2.10	10.02*
Between Methods	1.99	13.52*	2.30	15.44*
Interaction	5.21*	1.59	1.30	.51
Means for Teachers:				
Experienced	(16.65)	16.23	(17.29)	17.84
Substitute	(15.56)	14.57	(16.37)	14.85
Means for Methods:				
Television	(16.67)	13.98	(17.08)	14.67
Classroom	(15.54)	16.63	(16.35)	18.22
Interaction:				
Exp-TV	17.91	(14.65)	(18.44)	(16.47)
Exp-Class	15.20	(17.89)	(16.45)	(19.21)
Sub-TV	15.25	(13.30)	(16.50)	(17.12)
Sub-Class	15.98	(15.63)	(16.22)	(17.12)

( )—included for information only

ATTRIBUTE "LOSS" ON TELEVISION

From an operational point of view, it was thought desirable to compare student ratings of teachers on television. Results of ratings of the activity trait are shown in Table 27.

Because of the small number of students in each class, no significant differences were obtained for individual experiments, although the experienced teacher on television was rated as slightly more *Active* than the substitute teacher on television in every case.

It will be recalled that during the four experi-

TABLE 27
"t" for Means of Student Ratings of "Activity" of Experienced and Substitute Teachers on Television

Experiment	Teacher	N	Mean	Difference in Means	x^2	"t"
1	Experienced	23	10.22	1.47	277.66	1.83
	Substitute	20	8.75			
2	Experienced	20	9.00	1.15	243.50	.45
	Substitute	20	7.85			
3	Experienced	16	10.81	1.26	131.29	1.92
	Substitute	20	9.55			
4	Experienced	17	9.37	1.80	330.07	1.91
	Substitute	23	7.57			
Composite (Class)	Experienced	80	10.64	.67	670.10	2.02*
	Substitute	78	9.97			
Composite (TV)	Experienced	76	10.08	1.68	982.62	4.23*
	Substitute	83	8.40			

Average "Loss" from Classroom to Television:
Experienced: 10.64–10.08/10.64= 5.3%
Substitute: 9.97– 8.40/ 9.97=13.7%

ments, each class group was exposed once to an experienced teacher on television, once to a substitute teacher on television, once to an experienced teacher in the classroom, and once to a substitute teacher in the classroom. It was thus possible to develop composite scores for each of the combinations, and these combinations are shown and compared in Table 27. In the classroom the experienced teacher was rated more *Active* than the substitute. On television the experienced teacher was rated significantly more *Active* than the substitute. The loss of activity points of the experienced teacher as he transferred to television was, on the average for the four experiments, 5.3 per cent. The loss of activity points of the substitute teacher was 13.7 per cent.

The data in Table 27 answer another question sometimes raised when speculating on the relative merits of the two methods of instruction. The experienced teacher on television, on the average, was rated as equally *Active* (10.08) with the substitute teacher in the classroom (9.97).

Students also rated teachers on three scales indicating a potency trait, and the results are shown in Table 28.

Conclusions regarding potency were similar to those regarding activity. On television, the experienced teacher was rated as more *Potent* in all experiments and significantly more potent in two experiments. It was therefore not surprising that, for the composite scores of the entire group, the experienced teacher was rated significantly

TABLE 28
"t" for Means of Student Ratings of "Potency" of Experienced and Substitute Teachers on Television

Experiment	Teacher	N	Mean	Difference in Means	x^2	"t"
1	Experienced	23	17.91	2.66	423.60	2.71*
	Substitute	20	15.25			
2	Experienced	20	14.65	1.35	644.70	1.08
	Substitute	20	13.30			
3	Experienced	16	17.81	1.31	385.44	1.11
	Substitute	20	16.50			
4	Experienced	19	16.47	3.30	646.04	2.65*
	Substitute	23	13.17			
Composite (Class)	Experienced	80	17.14	.99	1310.88	2.14*
	Substitute	78	16.15			
Composite (TV)	Experienced	78	16.71	2.20	2099.78	3.83*
	Substitute	83	14.51			

Average "Loss" from Classroom to Television:
Experienced: 17.14–16.71/17.14= 2.5%
Substitute: 16.15–14.51/16.15=10.2%

more *Potent* on television than the substitute teacher; whereas, there was less difference, although still considered to be significant, when the two were compared in the classroom. The average loss of potency points of the experienced teacher as he transferred to television was 2.5 per cent. The loss of potency points of the substitute teacher as he transferred to television was 10.2 per cent.

Lastly, the experienced teacher on television, on the average, was rated equally, (16.71), *Potent* with the substitute teacher in the classroom (16.15).

On the basis of the use of the preceding semantic differential scales to estimate teacher potency and activity traits in the classroom and on television, the following conclusions were made:

> H_{11}—Superior and average teachers will transfer to television with equal losses in activity and potency personality traits. *REJECT*
>
> *Conclusion:* The experienced teacher can make the transition from classroom to television with very small losses of activity and potency traits. The losses sustained by the experienced teacher will be significantly less than the losses sustained by the substitute teacher. In fact, the experienced teacher, on the average, will be rated as *Active* and as *Potent* on television as the substitute teacher in the classroom.

ATTITUDES TOWARD TELEVISED INSTRUCTION

The third general area of interest in this study concerned student attitudes toward teaching by television and possible relationships between these attitudes, measures of achievement, and teacher ratings.

Hypothesis 12 suggested that students taught by experienced teachers would reflect more favorable attitudes toward the concept, "Teaching by Television," than students taught by substitute teachers. A rating instrument consisting of thirteen semantic differential scales was administered to the two class groups exposed to television after each of the four experiments. At some time during the course, therefore, each class rated the concept, "Teaching by Television," after exposure to an experienced teacher and to a substitute teacher. Table 29 compares the means of composite scores of the entire class on each semantic scale after exposure to experienced and substitute teachers.

Although very slight differences were consistently obtained favoring experienced teachers, none approached significance. Apparently, no unusual teacher "halo" effect was present to affect student ratings of televised instruction.

Since no significant differences were found for individual scales on the "Teaching by Television" instrument, it was assumed that the best single score representing a student's evaluation of televised instruction might be a combined score of ratings from the thirteen separate scales. Accordingly, a total score was computed for each student. A comparison between means of teachers for each experiment is shown in Table 30.

For each experiment, the class mean attributed to the section taught by the experienced teacher was slightly higher than the section taught by the substitute teacher. Differences varied approximately from 1 per cent to 4 per cent. No difference, however, was statistically significant.

TABLE 29

"t" for Means of Student Ratings of 13 "Teaching by Television" Scales After Exposure to Experienced and Substitute Teachers (N exp=78; N sub=83)

Scale	Means Experienced	Means Substitute	Difference in Means	x^2	"t"
Strong—Weak	5.58	5.43	.15	313.43	.67
Ordered—Chaotic	5.73	5.47	.26	202.02	1.46
Profound—Shallow	5.37	5.22	.15	222.32	.80
Exciting—Dull	5.44	5.18	.26	283.47	1.22
Valuable—Worthless	6.13	6.02	.11	156.67	.62
Personal—Impersonal	4.41	4.36	.05	486.03	.18
Red—Green	3.60	3.82	−.22	295.87	1.01
Authoritative—Superficial	5.72	5.49	.23	223.54	1.22
Effective—Ineffective	5.85	5.70	.15	263.62	.74
Clear—Hazy	5.74	5.57	.17	237.26	.88
Easy—Hard to take notes	5.23	5.06	.17	400.55	.68
Dynamic—Static	5.19	5.17	.02	364.76	.08
Intimate—Remote	4.63	4.47	.16	424.89	.62

TABLE 30

"t" for Means of Ratings of 13 "Teaching by Television" Scales by Classes Exposed to Experienced and Substitute Teachers

Experiment	N Exp	N Sub	Means Experienced	Means Substitute	Difference in Means	x^2	"t"
1	23	20	67.03	66.20	.83	4700.16	.25
2	20	20	67.70	65.25	2.45	5727.95	.63
3	16	20	73.44	70.25	3.19	3185.69	.98
4	19	23	67.84	66.26	1.58	6585.01	.40
Composite	78	83	68.72	66.96	1.76	20953.10	.97

Likewise, composite scores of total class ratings of experienced and substitute teachers were not significantly different.

Inspection of the data in Table 30 did reveal one interesting fact. Ratings for experienced teachers for Experiments 1, 2, and 4 were approximately the same; and ratings for substitute teachers for Experiments 1, 2, and 4 were approximately the same. Both experienced and substitute teachers scored approximately the same number of points higher than their colleagues on Experiment 3. Accordingly, data from Experiments 1, 2, and 4 were combined and compared with combined data for Experiment 3. Results of the comparison are shown in Table 31.

"Teaching by Television" was rated significantly higher for Experiment 3 than the televised instruction given for the other experiments. The caption on Table 31 suggests the only clue to explain the difference. Experiment 3 made extensive use of a "visual aid." A blackboard was used, on which was sketched a classification system for television programming. The blackboard-chart was in view for approximately fifteen minutes. This usage was the only instance in which the experimental lectures were permitted to deviate from a straight unaided lecture presentation.

TABLE 31

"t" for Means of Total Class Ratings of "Teaching by Television" Under Conditions of Exposure to TV Lectures With and Without Visual Treatment

Condition	N	Mean	Difference in Means	x^2	"t"
Visual Treatment of Lecture (Experiment 3)	36	71.67	4.97	20388.00	2.29*
Lectures Without Visualization (Experiments 1, 2, & 4)	125	66.70			

Of course, the comparison is very crude, technically. One subject, moderately visualized, was being compared with entirely different subject matter content. No inferences should be drawn. However, the fragmentary evidence does suggest the hypothesis that appropriate visualization techniques may result in improved student acceptance of instructional television.[17]

To the hypotheses initially developed for this experiment was added another concerned with student attitudes toward televised instruction. At the first meeting of the course, students completed the "Teaching by Television" scale. During the semester, therefore, each student rated the concept three times: before any experience with televised instruction, and after a lecture by an experienced teacher and a lecture by a substitute teacher. As no teacher differences were found, the two post-lecture rating scores were combined into a single estimate of "Teaching by Television" after exposure to the experimental lectures. Tables 32 and 33 show the results. Table 32 compares the means of each class group on each scale before and after exposure to television instruction. One observes, for example, mixed feelings on the two "activity" scales, *Exciting—Dull* and *Dynamic—Static*, and on the "potency" scale, *Strong—Weak*; and individual classes would not say televised instruction was more *Effective* or *Valuable*, perhaps because their judgment of these traits was already quite high. Considerable fluctuation occurs. A substantial amount of deviation may be attributed to small class size.

Table 33 combines individual scale ratings of each of the four class groups into means representative of the reactions of the entire class to "Teaching by Television" and compares the means prior to such instruction and after instruction.

TABLE 32

Means of Student Ratings of 13 "Teaching by Television" Scales Administered to 4 Classes Before and After Exposure to Televised Instruction

Scale		Class 1		Class 2		Class 3		Class 4	
		Pre	Post	Pre	Post	Pre	Post	Pre	Post
	(N =	20	39	20	40	23	46	19	36)
Strong—Weak		5.20	5.10	5.65	5.65	5.25	5.65	4.89	5.56
Ordered—Chaotic		5.45	5.59	6.05	5.55	5.12	5.54	5.47	5.72
Profound—Shallow		4.65	4.97	5.05	5.58	4.86	5.33	4.84	5.28
Exciting—Dull		4.95	5.10	5.55	5.48	5.55	5.13	4.95	5.56
Valuable—Worthless		5.80	5.92	6.10	6.08	6.07	6.02	5.95	6.21
Personal—Impersonal		3.35—*—	4.31	3.25—*—	4.43	3.56	4.30	2.94—*—	4.53
Red—Green		4.10	4.08	4.15	3.70	3.26	3.57	3.95	3.53
Authoritative—Superficial		5.15	5.59	5.30	5.48	4.90—*—	5.54	5.37	5.83
Effective—Ineffective		5.45	5.49	6.20	6.03	5.28	5.50	5.52	5.89
Clear—Hazy		5.15	5.56	5.50	5.68	5.30	5.48	5.00—*—	5.94
Easy—Hard (to take notes)		3.85—*—	4.95	4.60—*—	5.38	4.77	4.93	4.32—*—	5.36
Dynamic—Static		4.75	5.15	5.35	5.23	5.00	5.13	5.42	5.19
Intimate—Remote		3.85—*—	4.69	3.90	4.45	3.82	4.33	3.78—*—	4.78

—*— Significant difference between means at .05 level.

TABLE 33

"t" for Means of Student Ratings of 13 "Teaching by Television" Scales Before and After Exposure to Experimental Television Lectures (N before = 82; N after = 161)

Scale	Means		Difference		
	Before	After	in Means	s^2	"t"
Strong—Weak	5.26	5.50	.24	439.87	1.21
Ordered—Chaotic	5.51	5.60	.09	298.23	.60
Profound—Shallow	4.85	5.29	.44	353.52	2.66*
Exciting—Dull	5.27	5.30	.03	399.19	.17
Valuable—Worthless	5.99	6.07	.08	221.10	.61
Personal—Impersonal	3.29	4.39	1.10	784.10	4.50*
Red—Green	3.84	3.71	−.13	376.80	.77
Authoritative—Superficial	5.17	5.60	.43	337.17	2.68*
Effective—Ineffective	5.63	5.71	.08	467.88	.42
Clear—Hazy	5.24	5.65	.41	373.64	2.43*
Easy—Hard to take notes	4.40	5.14	.74	547.43	3.62*
Dynamic—Static	5.12	5.18	.06	380.58	.23
Intimate—Remote	3.84	4.53	.69	646.84	3.11*

After exposure, students evaluated "Teaching by Television" as significantly more *Profound* and more *Authoritative* than before exposure. Students decided that television instruction was more *Clear*, and that it was *Easier to Take Notes* than they had anticipated. And they thought teaching by television was more *Intimate* and much more *Personal* than they had expected. The latter two modifications of belief were especially significant because reversal rather than reinforcement of position occurred. *Intimate* and *Personal* changed from negative ratings (3.84 and 3.29, respectively) to positive ratings (4.53 and 4.39, respectively).

On the basis of the preceding administration of the measuring instrument consisting of thirteen semantic differential scales connoting aspects of the concept, "Teaching by Television," the following conclusions were made:

H_4—*Students will reflect equally favorable attitudes toward televised instruction whether taught by superior or average teachers. FAIL TO REJECT*

Conclusion: Students appear to rate the concept, "Teaching by Television," independently from the teacher. It is entirely possible that selection of outstanding teachers will not necessarily insure the most effective television instruction. The medium may be able to contribute its own unique values.

H_5—*Student attitudes toward televised instruction will not change perceptibly after exposure to such instruction. REJECT*

Conclusion: After the series of experimental lectures, students rated "Teaching by Television" as significantly more Profound, Authoritative, Clear, Intimate, Personal, and Easy to

Take Notes than before the instruction. Effective television teaching can orient student reaction more favorably toward the medium.

Lastly, the tentative hypothesis that appropriate and total use of the medium may result in improved student acceptance of instructional television should be mentioned as worthy of further investigation.

RELATIONSHIPS BETWEEN COGNITIVE AND AFFECTIVE BEHAVIOR

The last set of hypotheses suggested that no significant relationships would exist between measures of cognitive behavior and attitudes toward televised instruction or teachers; but that significant relationships would exist between measures of affective behavior and attitudes toward televised instruction and teachers.

Measures of cognitive behavior were derived by combining student scores obtained on the posttests of immediate recall of factual information[18] with the five questions dealing with critical thinking that were included in the quarterly examinations.[19]

Measures of affective behavior were defined as the total attitude score of each student on the four "Attitudes Toward Broadcasting" scoring schedules administered after each experimental lecture.[20]

Measures of attitudes toward televised instruction were defined as the total score by students on the 13-item "Teaching by Television" scale administered to class groups after each televised lecture.[21]

Measures of attitudes toward teachers were defined as the total score by students on the 19-item "Today's Teacher" scale administered to all class groups after each experimental lecture.[22]

For each experiment, two classes received televised instruction, two classes received instruction from experienced teachers, and two classes received instruction from substitute teachers. Ratings of televised instruction and of teachers for each pair of classes were combined into a single distribution of scores.

Pearson product-moment correlation coefficients were computed for each set of scores and the results are shown in Table 34 and Table 35. Because sample size in all cases is limited to approximately forty students (two class groups), the coefficients are relatively unstable, and results should be interpreted as tentative.[23]

Study of data in Table 34 revealed no significant correlations between measures of cognitive behavior and attitudes toward televised instruction in three of four experiments. The fourth correlation obtained in Experiment 2 is suspiciously high.

A similar pattern for teacher ratings occurred. No significant correlations between measures of cognitive behavior and attitudes toward experienced teachers were found in three (and perhaps four) experiments. Likewise, no significant correlations between measures of cognitive behavior and attitudes toward substitute teachers were

TABLE 34

Relationships between Cognitive Behavior Scores and Measures of Attitudes toward Televised Instruction and Teachers

Cognitive Behavior vs.	r	N	σ_r	C.R.$=r/\sigma_r$
A. Televised Instruction				
(13-item scale, "Teaching by Television")				
Experiment 1	.165	42	.15	.43
Experiment 2	.730	39	.08	9.13*
Experiment 3	.240	35	.16	1.50
Experiment 4	.188	42	.15	1.25
B. Teacher Ratings				
(19-item scale, "Today's Teacher")				
a. Experienced Teacher				
Experiment 1	.162	43	.15	1.08
Experiment 2	.280	39	.15	1.89*–
Experiment 3	.137	37	.16	.85
Experiment 4	.016	38	.16	.09
b. Substitute Teacher				
Experiment 1	.205	38	.16	1.28
Experiment 2	.148	43	.15	.99
Experiment 3	.061	39	.16	.38
Experiment 4	.306	40	.14	2.13*

found in three of four experiments. The weight of evidence favors the hypothesis of no correlation between the measures.

Study of data in Table 35 reveals less conclusive evidence, although an interesting pattern. In two of four experiments, 2 and 4, correlation coefficients significantly greater than zero are obtained between measures of affective behavior and attitudes toward televised instruction.

Coefficients significantly greater than zero are obtained between measures of affective behavior and attitudes toward experienced teachers for Experiments 2 and 4. And significant (or nearly so) correlations are obtained between measures of affective behavior and attitudes toward substitute teachers for the same experiments.

Based on the evidence presented above, the following conclusions were made:

H_0—No significant relationships will be found between measures of cognitive behavior and attitudes toward televised instruction. *FAIL TO REJECT*

H_0—No significant relationships will be found between measures of cognitive behavior and attitudes toward teachers. *FAIL TO REJECT*

Conclusions: Although inconclusive, it would appear that students, perhaps because of pressures inherent in the learning situation, will learn factual information to the same extent no matter what their opinions of the instructional method or of the teachers.

H_0—No significant relationships will be found between measures of affective behavior and attitudes toward televised instruction. (*REJECT*)

H_0—No significant relationships will be found between measures of affective behavior and attitudes toward teachers. (*REJECT*)

Conclusions: Although on shaky ground, the evidence points in the direction of suggesting that students' tendencies toward accepting points of view presented by teachers may be related to their opinions of the instructional method and of the teachers; that the more favorably oriented the student may be to the teaching method and to the teacher, the more likely that he will accept the teacher's point of view.

TABLE 35

Relationships between Affective Behavior Scores and Measures of Attitudes toward Televised Instruction and Teachers

Affective Behavior vs.	r	N	σ_r	C.R.$=r/\sigma_r$
("Attitudes Toward Broadcasting" scales)				
A. Televised Instruction				
(13-item scale, "Teaching by Television")				
Experiment 1	−.048	41	.16	.30
Experiment 2	.427	39	.15	2.85*
Experiment 3	.079	34	.17	.46
Experiment 4	.318	42	.14	2.27*
B. Teacher Ratings				
(19-item scale, "Today's Teacher")				
a. Experienced Teacher				
Experiment 1	.006	43	.15	.04
Experiment 2	.394	39	.14	2.90*
Experiment 3	−.443	36	.13	3.31*
Experiment 4	.508	38	.12	4.20*
b. Substitute Teacher				
Experiment 1	−.002	37	.16	.01
Experiment 2	.258	43	.14	1.80*—
Experiment 3	.045	39	.16	.28
Experiment 4	.275	41	.14	1.90*—

ADDITIONAL PERSONAL ATTRIBUTES OF TEACHERS

Earlier hypotheses were concerned with evaluating estimates of teacher activity and teacher potency by use of combined scores from semantic differential scales. Scales used in the analysis to estimate activity were *Exciting—Dull* and *Dynamic—Static.* Scales used to estimate potency were *Strong—Weak, Enthusiastic—Not Enthusiastic,* and *Vigorous—Lifeless.* The scales constituted a portion of the twenty-scale instrument, "Today's Teacher," previously described.

TABLE 36

Means of Scores of Students on "Today's Teacher" Scales After Exposure to Experienced and Substitute Teachers and to Television and Classroom Instruction

	Experiment											
	1			2			3			4		
	Teacher			Teacher			Teacher			Teacher		
Scale	Exp		Sub	Exp		Sub	Exp		Sub	Exp		Sub
Definite—Uncertain	5.77		5.70	5.72	—*—	5.00	6.43	—*—	6.07	6.42	—*—	5.63
Profound—Shallow	5.35		5.00	5.49	—*—	4.55	5.76	—*—	5.26	5.90	—*—	4.85
Pleasant—Unpleasant (to listen to)	5.67		5.56	5.36		5.41	5.76		5.79	5.95	—*—	4.68
Confident—Nervous	6.07	—*—	5.43	6.12	—*—	4.14	6.63	—*—	5.79	6.07	—*—	5.42
Personal—Impersonal	4.79		4.38	5.49		5.14	5.00		4.31	5.40		4.60
Authoritative—Superficial	5.72	—*—	5.02	5.47	—*—	5.07	6.18	—*—	5.21	6.13	—*—	5.22
Effective—Ineffective	5.67		5.38	5.90	—*—	5.18	6.10	—*—	4.90	6.02	—*—	5.22
Natural—Affected	5.09		5.28	5.83	—*—	5.07	5.78	—*—	5.24	5.34		5.23
Clear—Hazy	5.44		4.95	5.47		5.18	6.20	—*—	5.63	6.15	—*—	5.32
Inspiring—Apathetic	5.37		5.00	5.18	—*—	4.66	5.42	—*—	5.02	5.68	—*—	4.95
Easy—Hard (to take notes)	4.28		4.77	5.31	—*—	4.27	6.20		5.95	5.55	—*—	4.70
Intimate—Remote	4.72		4.51	5.20	—*—	4.68	4.97		4.38	5.20	—*—	4.55
Brilliant—Mediocre	5.74	—*—	4.59	5.20	—*—	4.32	5.29	—*—	4.90	5.42	—*—	4.38
Relaxed—Tense	6.04	—*—	5.23	5.90	—*—	4.03	6.20	—*—	5.30	5.88	—*—	5.30
	Method			Method			Method			Method		
	TV		Class	TV		Class	TV		Class	TV		Class
Definite—Uncertain	6.16	—*—	5.49	5.30		5.37	6.14		6.12	5.64	—*—	6.42
Profound—Shallow	5.30		5.03	4.83		5.12	5.39		5.63	4.93	—*—	5.86
Pleasant—Unpleasant (to listen to)	5.74		5.14	5.08		6.14	5.61		5.92	4.60	—*—	6.11
Confident—Nervous	6.14	—*—	5.36	5.68	—*—	4.51	6.17		6.25	5.48		6.06
Personal—Impersonal	4.79		4.38	4.90	—*—	5.67	4.86		4.45	4.29	—*—	5.81
Authoritative—Superficial	5.60	—*—	5.10	5.12	—*—	5.60	5.75		5.63	5.29	—*—	6.14
Effective—Ineffective	5.51		5.57	5.10	—*—	5.67	6.08		5.92	5.05	—*—	6.28
Natural—Affected	5.22		5.02	5.50		5.37	5.53		5.48	4.83	—*—	5.83
Clear—Hazy	5.44		4.93	4.63	—*—	5.93	5.83		6.00	5.26	—*—	6.28
Inspiring—Apathetic	5.30		5.07	4.48	—*—	5.30	5.31		5.15	4.79	—*—	5.92
Easy—Hard (to take notes)	4.55		4.71	4.58		5.12	5.89		6.25	4.43	—*—	5.92
Intimate—Remote	4.72		4.51	4.65	—*—	5.19	4.83		4.68	4.29	—*—	5.56
Brilliant—Mediocre	5.44	—*—	4.92	4.50	—*—	4.95	5.42	—*—	4.80	4.24	—*—	5.64
Relaxed—Tense	5.93	—*—	5.36	5.43	—*—	4.40	6.00	—*—	5.73	5.24	—*—	5.97

—*— Significant F-Ratio obtained between values at .05 level.

The additional scales were included on the basis of face validity and not on the basis of comprising specific dimensions beyond activity and potency, and were not originally planned as a part of these experiments. However, an analysis of variance was computed for each scale, and the mean scores of each scale for teacher variations and for method variations for each experiment are shown in Table 36.

The preponderance of comparative ratings significantly favored the experienced teacher over the substitute teacher. With the exception of Experiment 1, where the ratings were believed lowered by an extraneous factor, nearly every comparison favored the experienced teacher. He was rated as significantly more *Authoritative* and *Brilliant* on all four experiments even though his substitute was teaching identical material in nearly identical terminology. He was also rated as more *Confident* and *Relaxed* on all four experiments. In three experiments, the experienced teacher was rated as significantly more *Profound, Inspiring, Definite,* and *Effective;* and in two as more *Natural, Clear, Personal, Intimate,* and *Easy to take notes.* The superiority of the "superior" teacher on the rating scales is overwhelming. The experienced teacher may produce an educational objective not directly measured in these experiments, namely, the inculcation in a student of a *feeling* that he is participating in a valuable educational experience.

As demonstrated with the activity and potency concepts earlier, students taught face to face in the classroom generally rated the teacher higher on other scales of personal attributes than when taught by television. But the deviations from this pattern may be significant.

In three of four experiments, the teacher was rated as significantly more *Relaxed* on television than in the classroom. In two experiments the television teacher was rated as significantly more *Confident* than the classroom teacher, while equal ratings were obtained in a third section. The classroom teacher was rated higher on both scales in Experiment 4, where the teacher read from a manuscript.

Apparently students accepted the manuscript as normal in the classroom; but not so on television where reading from manuscript was regarded as an unnatural act. On television, the teacher was also a performer. And performers *talk* to you; they do not *read* to you. Teachers on television may be compared to commercial announcers who would not dream of appearing to read their messages, lest they seem to lack confidence and appear relatively more affected and tense.

In Experiments 1 and 3, the television teachers were rated as significantly more *Brilliant;* in Experiments 2 and 4, the classroom teacher rated higher. While classroom teachers were rated as significantly more *Inspired* and more *Personal* in Experiments 2 and 4, there was a tendency for television teachers to excel on these scales in Experiments 1 and 3.

Ten significant interactions, not indicated in Table 36, were obtained, including five with Experiment 1 for the following scales: *Definite, Profound, Confident, Authoritative,* and *Brilliant.* Each interaction resulted from lower-than-expected ratings of the experienced teacher in the classroom probably occasioned by the temporary factors described earlier. Two significant interactions occurred in Experiment 2. The substitute teacher in the classroom was rated less *Confident* than other conditions. And on the scale, *Easy to take notes,* either the experienced teacher in class rated higher than expected or the substitute teacher in class rated lower than expected. One significant interaction occurred in Experiment 3, where the experienced teacher on television was rated more *Effective* than other conditions. Two significant interactions occurred in Experiment 4. The substitute teacher on television was rated less *Authoritative* and less *Pleasant to listen to* than other conditions.

The rating scales on additional attributes of teachers indicate that, although experienced teachers excel as a group, a considerable number of variations in ratings occur when the factor of television is introduced. This study has not attempted to evaluate the differences; merely to uncover some of them. The "ideal" ratings for an "ideal" television teacher have yet to be determined.

REFERENCES

1. Multiple-choice questions to measure immediate recall of factual information are included in Appendix A.

2. Throughout this study, and unless otherwise noted, an asterisk (*) is indicated whenever a statistical gain is significant at the .05 level of confidence or beyond. In a few instances, (*—) designates the .10 level of confidence.

3. The factorial design took the form of a four-fold table with two teachers (experienced and substitute) and two methods (television and classroom). There were unequal numbers in each cell for every analysis. Because of the relatively small number of cases in the cells, it was felt desirable not to reduce all cells to the same size by random elimination of scores, as too much information would be discarded. Rather, a longer and more complex analysis which used all information, but corrected the data for unequal subclass numbers within the cells, was employed. See George W. Snedecor, *Statistical Methods* (Ames: Iowa State College Press, 1946), pp. 287 f.

4. This test was constructed primarily to test student recall of specific examples of various types of censorship described in the lecture. Students exposed to the experienced teacher in the classroom tended to do better than those exposed to the experienced teacher on television on eight of twelve questions; while students exposed to the substitute teacher in the classroom tended to do better than those exposed to the substitute teacher on television on five questions. It would be interesting to see if visual presentation of censorship examples on television would be accompanied by greater recall.

5. Critical Thinking questions are included in Appendix A.

6. Essay questions are included in Appendix A.

7. Although students had an opportunity to discuss the substance of the experimental lectures during their regular discussion periods, and so might have been influenced additionally beyond the lectures, no discussions were held within the context of the essay questions. It is believed, therefore, that the results are a useful indication of teacher-methods effects. One might have preferred a situation in which the essay questions were answered in the total absence of class or other discussion. Such an alternative was not practical—and, in principle, might be considered ineffective teaching.

8. As a final note to the section, the most difficult task facing one who hopes to demonstrate superiority of teachers or methods in the area of critical thinking is the design of test instruments sufficiently sensitive to measure any differences.

9. A copy of the schedule appears in Appendix A. "Correct" answers are indicated by an "x". Confirmation of

each answer may be made by consulting a transcript of the lecture, Appendix B. Statements 1, 3, and 7 of the original list of 20 were eliminated from the analysis as ambiguous.

10. See Appendix A for statements and correct responses. Statement 1, relating to the second lecture, was eliminated because of ambiguity.

11. See Appendix A. Only Statements 1-16 are a part of this study.

12. Means and gains should be interpreted in relation to a 7-point scale where 7 is the highest favorable value attainable and 1 is the lowest.

13. Student reaction to these words serves to remind one of the occasional importance of a single word in modifying opinions. The results also suggest the sensitivity of the measuring instrument.

14. Charles E. Osgood, George Suci and Percy Tannenbaum, *The Measurement of Meaning* (Urbana: University of Illinois Press, 1957). The third dimension, labeled "evaluative," was found by these authors to account for a substantial loading on all scales. Accordingly, for this experiment, the total score registered by students to a battery of twenty semantic scales was used later as an indication of overall evaluative rating of each teacher, but was excluded from this portion of the study.

15. *Supra*, p. 13.

16. In rejecting the hypothesis, one should be reminded that the television presentation, for these experiments, was deliberately limited. A useful future hypothesis would be that television instruction, by means of appropriate production techniques, may be made to seem more *Active* to students than classroom instruction.

17. Whether such changes in the instructional method would also result in significant gains in other educational objectives, e.g., information gain, is irrelevant to this phase of the experiment although of vital concern to the overall subject of improved use of educational media.

18. Tables 6, 7, 8, 9.

19. Table 11.

20. Table 14.

21. Table 20.

22. Table 26. The last scale on the original instrument, *Warm-Cool*, was eliminated because of ambiguity. Those familiar with the expression, "Cool, man!" will understand the decision.

23. In the discussion of correlations, a level of confidence of .20, corresponding to a Critical Ratio of 1.28, was arbitrarily selected. Such a level decreases the likelihood of Type II errors, with which one should be concerned in connection with H_2 and H_3; but increases the likelihood of Type I errors in connection with H_2 and H_4.

CHAPTER IV

SUMMARY AND CONCLUSIONS

SUMMARY

The purpose of this study was to evaluate the effectiveness of the experienced college teacher as he lectured to students over television.

Four experimental lectures were presented within the context of an existing liberal arts course. For each lecture, an experienced teacher lectured to one class in the conventional face to face manner and to a second class by means of television while, simultaneously, an inexperienced teacher presented the same lecture to a third class in the conventional manner and to a fourth class by means of television. The television lectures were recorded prior to the experiment to permit the teachers to be seen at the same hour in class and over television.

Four pairs of experienced and inexperienced teachers were selected for the four experimental lectures. Elements were so rotated that, at some time during the experiments, each student group was exposed to an experienced teacher in class, another experienced teacher on television, an inexperienced teacher in class, and another inexperienced teacher on television. The factorial design permitted one to relate student achievement to teachers and to methods.

CONCLUSIONS

On the basis of these experiments the following conclusions were made:

1) Experienced or substitute teachers are equally effective in a lecture situation if the educational goal is to disseminate information for immediate retention.

2) Experienced or substitute teachers appear to be equally effective in a lecture situation in achieving similar levels of affective behavior. The conclusion is startling. Provided some undefined minimum level of sincerity and believability is achieved, novice teachers are able to establish rapport sufficiently to gain acceptance of new concepts and values to the same degree that experienced professors are able to do so.

3) Experienced teachers are generally more effective than substitute teachers in teaching students to apply principles, interpret data and integrate knowledge, even though both teachers use approximately the same words in the teaching process. The experienced teacher excels in accomplishing the educational objective of teaching aspects of "critical thinking."

4) On two personality traits, students perceive experienced teachers as more *Active* and more *Potent* than substitute teachers.

5) The superiority of the experienced teacher on other personal attributes is overwhelming. On individual trait scales, the experienced teacher was rated more *Authoritative*, *Brilliant*, *Confident* and *Relaxed* on all four experiments, and more *Profound*, *Inspiring*, *Definite* and *Effective* on three. The experienced teacher may inculcate in students a feeling that the student is participating in a valuable educational experience even though the substitute teacher may be communicating information with equal effect.

6) Television and classroom instruction are generally equally effective when the educational goal is to disseminate information for immediate

retention and the information is presented verbally.

7) Television and classroom instruction are likewise equally effective when the educational goal is to teach students to apply principles, interpret data and integrate knowledge.

8) Television instruction is also as effective as classroom instruction when the educational goal is to modify attitudes, or to inculcate new concepts and values. This conclusion, together with the two preceding conclusions, confirms under rigid conditions the notion that the television facility is essentially a neutral instrument when either cognitive or affective messages are transmitted by verbal means.

9) Modification of attitudes and values is a relatively uncertain, albeit desirable, accomplishment; and is sometimes associated with the slightest change in vocabulary or manner of the communicator. Prior television recording has an advantage, when supplemented by pretesting, of assuring consistent accomplishment of objectives.

10) While some variations are noted, students generally perceive teachers in the classroom as more *Active* and more *Potent* than teachers on television.

11) An experienced teacher can make the transition from classroom to television with very small losses of Activity and Potency personality traits. The losses sustained by the experienced teacher will be significantly less than those sustained by the substitute teacher under similar circumstances. On the average, the experienced teacher on television will be perceived both as *Active* and as *Potent* as the substitute teacher in the classroom.

12) The addition of television into the instructional communications complex produced several interesting variations with other measures of personality traits. Teachers were described as significantly more *Relaxed* on television than in the classroom in three of four experiments, and significantly more *Confident* in two. In two experiments, teachers on television were rated significantly more *Brilliant, Personal* and *Inspiring* than in class; while the reverse occurred in the remaining experiments. The variations suggest that some teachers have more effective television personalities than others, and that the differences can be described and measured.

13) Information gain is probably unrelated to communication conditions. Although inconclusive from these experiments, it would appear that students, perhaps because of pressures inherent in the college learning situation, will learn factual material to the same extent no matter what their opinions of the instructional method or of the teachers.

14) Attitudinal change may be related to communications conditions. Although inconclusive, the evidence from these experiments tends to support the thesis that the more favorably oriented the student may be to the teaching method and to the teacher, the more likely he will be to accept the teacher's point of view.

15) Effective television teaching can orient student reaction more favorably toward the medium. After the television lectures, students rated "teaching by television" as significantly more *Profound, Authoritative, Clear, Intimate, Personal,* and *Easy to Take Notes* than before the instruction. Although reinforcement occurred with most scales, students reversed opinions from negative to positive on the *Intimate* and *Personal* scales.

16) Students appear to rate the concept, "teaching by television," independently from the teacher. Selection of outstanding classroom teachers may not necessarily insure the most effective television instruction. Creative use of the medium may be a contributory factor in achieving maximum value from the television instructional process.

The purpose of this research has been to explore the nature and extent of influence of the master teacher on television by determining whether a teacher of recognized ability can present a lecture on television with the same effect that he achieves in a college classroom. With respect to certain educational objectives, several questions have been answered affirmatively. In the areas of information gain, critical thinking, and acceptance of attitudes, an experienced teacher can present a lecture over television—even with minimal use of the medium—with equivalent results as obtained in a classroom. When compared with a substitute instructor teaching identical material after extensive rehearsal, the experienced teacher has an influence greater or equal in effect in achieving these educational objectives. The experienced teacher also makes the stronger impression on students on selected personality traits.

NEED FOR FURTHER STUDY

Other questions relating to the influence of the master teacher remain to be investigated. Can a great teacher accomplish another educational objective on television that truly makes him great in the classroom? Can he inspire and stimulate students to new excitements and new insights? Can the television teacher influence mood or emotion? While the medium may be considered as a neutral instrument when communicating information, the electronic barrier may reduce the impact of the teacher as an emotional catalyst to students.

Who is the most effective teacher on television and how may he be identified? Evidence from this study suggests that some excellent classroom teachers may be more effective television personalities than others. It should be possible to determine empirically factors of television teacher personality that have relevance to students, and, from these factors, to predict the most effective television teachers.

Identification of outstanding television teachers, however, may not necessarily insure outstanding television instruction. From a long range point of view, educational success must be accompanied by student satisfaction with his participation in the educational process. We need to determine principles for optimal rather than minimal use of the television medium in order to achieve a happy combination of maximum educative value and maximum student acceptance.

Concern for students and their reactions to the medium suggests another area for extensive exploration: the nature of the learner in the television communications process. Do certain kinds of individuals accept this instructional medium more readily than others? Some work has been carried out relating intellectual capacity to cognitive achievement from television instruction. But little evidence is available relating personality traits to achievement or satisfaction.

While considerable progress has been made in the experiments reported herein, much experimental work thus remains to be accomplished in the systematic study of the superior teacher on television.

APPENDIX A

TESTS AND INSTRUMENTS

TEST QUESTIONS MEASURING RECALL OF FACTUAL INFORMATION ADMINISTERED BEFORE AND AFTER EXPERIMENT 1

DIRECTIONS: Select the best answer for each of the following multiple-choice questions, and mark an "x" in the appropriate square to the left of the answer.

1. "The release of latent energy and power" is one definition of
   ☐ 1. freedom
   ☐ 2. control
   ☐ 3. responsibility
   ☐ 4. strength

2.* "License" can be best defined as
   ☐ 1. freedom without control
   ☐ 2. democracy without responsibility
   ☐ 3. democracy without control
   ☐ 4. freedom without responsibility

3. Our Constitution is centered on the recognition of the danger of
   ☐ 1. the abuse of power
   ☐ 2. taking advantage of the ignorant
   ☐ 3. curtailment of freedom
   ☐ 4. threats by foreign powers

4. The powers of the F.C.C. are outlined in the
   ☐ 1. Constitution
   ☐ 2. Communications Act
   ☐ 3. NAB Code
   ☐ 4. Federal Radio Act

5. Which of the following is not one of the three dangers always present in a democracy?
   ☐ 1. ignorance
   ☐ 2. indifference
   ☐ 3. insecurity
   ☐ 4. inertia

6. A race is doomed if it does not value
   ☐ 1. individuality
   ☐ 2. trained intelligence
   ☐ 3. free enterprise
   ☐ 4. physical development

7 The challenge for American Democracy lies in the fact that
   ☐ 1. most people in power become corrupt
   ☐ 2. the responsibility falls on individual citizens
   ☐ 3. democracy works best with small numbers of citizens
   ☐ 4. most citizens don't care to vote

8. During the past 150 years, the most important change in the concept of the abuse of power that has occurred is
   ☐ 1. the federal government has increased its power over citizens
   ☐ 2. power is now held by very few people who are mainly incompetent
   ☐ 3. power has spread into industry and private institutions
   ☐ 4. power has become ambivalent

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* Results of Question No. 2 excluded from analysis as experienced teacher in the classroom inadvertently neglected to cover the point.

9. What was regarded by George Bernard Shaw as "misery, slavery, hell on earth?"
☐ 1. being thrown, worn out, on the scrap heap
☐ 2. listening to ailments, grievances and complaints
☐ 3. the adding up of the misfortunes in everyday life
☐ 4. being used for a base purpose

10.[b] The captain of a commercial ocean liner is primarily responsible to
☐ 1. the owner of the ocean line
☐ 2. the port authorities
☐ 3. his passengers
☐ 4. the officer who is his second-in-command

TEST QUESTIONS MEASURING RECALL OF FACTUAL INFORMATION ADMINISTERED AFTER EXPERIMENT 2

1. The "mass arts" are *least likely* to involve
☐ 1. mass production
☐ 2. mass distribution
☐ 3. mass audience
☐ 4. mass creation

2. The principal guide lines to a reasonable censorship practice *include* an understanding of the concepts of (select wrong answer)
☐ 1. a clear and present danger
☐ 2. freedom of speech
☐ 3. the intent of the artist
☐ 4. the inherent nature of obscenity

DIRECTIONS: Most of the following examples illustrate various types of censorship. In some cases, no censorship problem may exist. In the space to the left of each example, place a number corresponding to the type of censorship that is involved according to the following numbering system:

1—overt censorship
2—hidden censorship
3—incidental censorship
4—insulting censorship
5—no problem of censorship

(______) 3. The Providence Journal refused to print the "Pogo" comic strip in its newspaper.

(______) 4. Elizabeth Taylor was given the power to censor John O'Hara's novel, *Butterfield Eight*, when she signed to star in the movie version.

(______) 5. The main theme, race prejudice, was altered in Rod Serling's television play, *Nightmare at Noon*, before its presentation.

(______) 6. The motion picture, *The Moon is Blue*, cannot be shown in certain cities in the United States.

(______) 7. Publishers don't publish much poetry anymore because they don't make very much money at it.

(______) 8. A mother disapproves of her youngster reading horror comic books.

(______) 9. For many years, *Lady Chatterley's Lover* could not be sold in the United States.

(______) 10. A natural gas association, sponsoring a television play about the Nuremberg trials, ordered the audio engineer to cut off the sound temporarily when the words "gas ovens" were used when describing concentration camps.

(______) 11. Syracuse has only two television stations, thus limiting the choice of available programs at any one time.

(______) 12. Producers of the TV version of *Born Yesterday* "cleaned up" some of the punch lines.

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[b] Results of Question No. 10 excluded from analysis as the question was not included on the pretest.

TEST QUESTIONS MEASURING RECALL OF FACTUAL INFORMATION ADMINISTERED AFTER EXPERIMENT 3

1. "Entertainment" constitutes _____ per cent of all programming that is on television.
   - ☐ 1. 25-35
   - ☐ 2. 45-55
   - ☐ 3. 61-70
   - ☐ 4. 80-90

2. The average "entertainment" program is produced for the purpose of
   - ☐ 1. changing the viewer
   - ☐ 2. enabling people to kill time
   - ☐ 3. gaining listeners
   - ☐ 4. selling products

3. The most prevalent system of broadcasting throughout the world is
   - ☐ 1. government licensed private enterprise
   - ☐ 2. government chartered monopoly
   - ☐ 3. government owned and operated
   - ☐ 4. a combination of 1, 2, and 3

4. An "educational" program may be defined functionally as one whose purpose is significant and ______________
   - ☐ 1. non-controversial
   - ☐ 2. controversial
   - ☐ 3. entertaining
   - ☐ 4. non-commercial

5. Among others, a "great" television system will include a proper balance of (select wrong answer)
   - ☐ 1. entertainment
   - ☐ 2. in-school programs
   - ☐ 3. commercials
   - ☐ 4. controversy

6. One of of the following is a good example of an insignificant program:
   - ☐ 1. a course in Sanskrit
   - ☐ 2. a discussion on the Panther Mountain dam project
   - ☐ 3. a lecture on mental health
   - ☐ 4. an adaptation of the opera, *Aida*

7. The unique feature of "in-school" broadcasting is that the
   - ☐ 1. purpose is significant
   - ☐ 2. audience is a "captive" one
   - ☐ 3. purpose is not to entertain
   - ☐ 4. teachers are not professional broadcasters

8. We will be able to say that we have taken a big step toward achieving "great" television when we can
   - ☐ 1. eliminate "westerns" and crime shows
   - ☐ 2. clean up the mess caused by rigged quiz shows, payola, and the like
   - ☐ 3. provide budgets for educational programs that are comparable to budgets for entertainment programs
   - ☐ 4. develop a system of broadcasting similar to the B.B.C.

9. In fitting educational programs into broadcast schedules, one should be
   - ☐ 1. simple in approach
   - ☐ 2. careful not to offend
   - ☐ 3. consistent
   - ☐ 4. purposive

10. A study made by the University of Chicago called radio
    - ☐ 1. a dynamic unifying force
    - ☐ 2. a power for good or evil
    - ☐ 3. the greatest tool for education
    - ☐ 4. the key to universal understanding

TEST QUESTIONS MEASURING RECALL OF FACTUAL INFORMATION ADMINISTERED AFTER EXPERIMENT 4

1. The most effective tool for encouraging better television programs is
   - ☐ 1. intelligent criticism
   - ☐ 2. greater praise where praise is due
   - ☐ 3. a more aggressive F.C.C.
   - ☐ 4. an improved rating system

2. The best test of a television program's quality is
   - ☐ 1. its rating
   - ☐ 2. the prestige of its star
   - ☐ 3. how well it accomplishes its declared purpose
   - ☐ 4. an analysis of the opinions of outstanding critics

3. When comparing spot-news coverage with the documentary program, a major difference is usually the
   - ☐ 1. lack of editorialization
   - ☐ 2. length
   - ☐ 3. production cost
   - ☐ 4. absence of controversy

4. The TV quiz scandals and payola were (select wrong answer)
   - ☐ 1. a reflection of American mores
   - ☐ 2. a deception of the public
   - ☐ 3. "fly specks" on TV's window pane
   - ☐ 4. the cause of former F.C.C. Chairman Doerfer's resignation

5. If established, the primary purpose of a "Syracuse Board of Television Review" would be to
   - ☐ 1. improve local programming
   - ☐ 2. make the "Emmy" awards a more meaningful event
   - ☐ 3. preview programs for the newspapers prior to airing
   - ☐ 4. keep local television free from obscene and offensive programs

6. By definition, a documentary (select wrong answer)
   - ☐ 1. holds a mirror up to nature
   - ☐ 2. is a study in depth of a major social problem
   - ☐ 3. consists of people talking in their natural environment
   - ☐ 4. is concerned with a single notable event

7. Most television citations, such as Sylvania or Peabody, are awarded
   - ☐ 1. for the purpose of calling attention to excellence
   - ☐ 2. to provide publicity for the sponsoring organization
   - ☐ 3. on the basis of nationwide popularity polls
   - ☐ 4. to enhance the prestige of the medium

8. A comedian developed primarily by television was
   - ☐ 1. Jack Benny
   - ☐ 2. Red Skelton
   - ☐ 3. Art Carney
   - ☐ 4. Milton Berle

9. Which of these mass media has the most direct personal contact?
   - ☐ 1. radio
   - ☐ 2. television
   - ☐ 3. motion pictures
   - ☐ 4. magazines

10. In the light of our modern world, choose the combination of words that best represents the reflection of an up-to-date viewpoint.
    - ☐ 1. library . . . books
    - ☐ 2. "Twentieth Century" . . . newsreel theatres
    - ☐ 3. television stations . . . books
    - ☐ 4. great drama . . . Broadway

QUESTIONS MEASURING CRITICAL THINKING ABILITY ADMINISTERED AS PART OF QUARTERLY TEST AFTER EXPERIMENT 1

1. A degree of freedom can be best acquired by
   ☐ 1. playing cribbage
   ☐ 2. buying a car
   ☐ 3. taking a hike
   ☐ 4. reading a textbook

2.* The pilot of a commercial airline plane is primarily responsible to
   ☐ 1. the owner of the airline
   ☐ 2. the control tower personnel at his destination
   ☐ 3. his passengers
   ☐ 4. his co-pilot

3*. When a power is ambivalent
   ☐ 1. the holder of that power is probably corrupt
   ☐ 2. it has to be controlled
   ☐ 3. people should be made aware of that ambivalence
   ☐ 4. it cannot be used for the betterment of mankind

4. The man likely to be the most corrupt would be a
   ☐ 1. president
   ☐ 2. chancellor
   ☐ 3. prime minister
   ☐ 4. king

5. If it is wrong to exploit the ignorance, credulity or weakness of people, who was exploited in the recent quiz scandals?
   ☐ 1. the contestants
   ☐ 2. the viewers
   ☐ 3. the network executives
   ☐ 4. the sponsors

6*. An obligation of the broadcaster is that he present
   ☐ 1. commercials
   ☐ 2. information of current events
   ☐ 3. editorials
   ☐ 4. programs for relaxation

7*. In his speech to Rosencrantz and Guildenstern, Hamlet showed that he recognized that
   ☐ 1. he was being used for other persons' purposes
   ☐ 2. one must practice any skill at which he wants to excel
   ☐ 3. the group is more important than the individual
   ☐ 4. control over evil is necessary

8. (Select wrong answer) The extent of the power of broadcasting may be seen from the fact that it
   ☐ 1. absorbs the bulk of our leisure
   ☐ 2. affects people's feelings and attitudes
   ☐ 3. reaches practically everybody
   ☐ 4. may be used for good or evil

9. If a telephone company suddenly provided service for only a few hours a day, and charged three times the present monthly rates
   ☐ 1. it would be proper for the government to intervene
   ☐ 2. the telephone officials would probably be corrupt
   ☐ 3. people would just stop using telephones
   ☐ 4. the government should nationalize this utility

10*. During the past 150 years, the most important change in the concept of the abuse of power that has occurred is
   ☐ 1. the federal government has increased its power over citizens
   ☐ 2. power is now held by very few people who are mainly incompetent
   ☐ 3. power has spread into industry and private institutions
   ☐ 4. power has become ambivalent

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[*] Included in the Final Examination for analysis on a delayed recall basis. Also rescored as part of a 5-item post-test following Experiment 1.

QUESTIONS MEASURING CRITICAL THINKING ABILITY ADMINISTERED AS PART OF QUARTERLY TEST AFTER EXPERIMENT 2

1. Censors think the motion picture, *The Grapes of Wrath*, should
   - ☐ 1. be sent abroad because it gives a pretty good idea of America during the depression years
   - ☐ 2. be edited before being shown abroad because it might create an incorrect impression upon those who had no other knowledge of the subject
   - ☐ 3. not be sent abroad because it contains some half-truths and distortions
   - ☐ 4. be sent only to non-Communist countries because the Communists could make use of some of the material for propaganda purposes

2. It is difficult to ban, suppress, or censor anything on the grounds of obscenity because
   - ☐ 1. the tests set forth by Judge Woolsey in the *Ulysses* case are too rigid
   - ☐ 2. there are laws against this type of censorship
   - ☐ 3. obscenity is hard to define
   - ☐ 4. the *First Amendment* to the Constitution guarantees free speech

3*. Although some people think that there is pornography in James Jones' book, *From Here to Eternity*, it has not been banned because
   - ☐ 1. no serious objections have been raised by the public
   - ☐ 2. pornography was not Jones' intent
   - ☐ 3. no federal agency has the authority to ban it
   - ☐ 4. there really is nothing offensive in the book

4. A speech which most people would agree should be censored prior to delivery would be
   - ☐ 1. a pro-segregation speech at Little Rock, Arkansas, in 1958
   - ☐ 2. a talk on disadvantages of a democracy given in 1959
   - ☐ 3. an anti-draft law speech given in 1917
   - ☐ 4. a speech by a presidential candidate insulting his opponent

5*. The solution to the censorship problem lies basically in the hands of
   - ☐ 1. the men in the advertising agencies
   - ☐ 2. the leaders of the broadcasting industry
   - ☐ 3. dedicated artists with a sense of public responsibility
   - ☐ 4. an educated and interested public

DIRECTIONS: Most of the following examples illustrate various types of censorship. In some cases, no censorship problem may exist. In the space to the left of each example, place a number corresponding to the type of censorship that is involved according to the following numbering system:

1—overt censorship
2—hidden censorship
3—incidental censorship
4—benefiting censorship
5—no problem of censorship

6. (______) No hard liquor advertising is seen on most television stations.

7. (______) Two of the major networks refuse to sell time for religious programs.

8. (______) The CBS interview with Soviet Premier Khrushchev in 1957 was a major event and aroused wide discussion. However, less than half of the CBS-affiliated stations carried the program. Those who rejected the program did so because of previous commitments, tight schedules, and financial problems.

9*. (______) The film editor at a television station eliminates a Japanese torture scene from a 1944 movie scheduled for presentation on "The Late Show."

10. (______) A television station decides not to present any horror films before 10:00 p.m. because it believes that young children, who might be awake earlier, should not see them.

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* Included in the Final Examination for analysis on a delayed recall basis. Also rescored as part of a 5-item posttest following Experiment 2.

51. (_____) In a recent TV variety show, Cole Porter's song, "Anything Goes," had one stanza changed as follows:

Original version:
Good authors too who once knew better words
Now only use four-letter words
Writing prose. Anything goes.

Revised version for TV:
Good authors too who once knew better words
Now only use three-letter words
Writing prose. Anything goes.

52*. (_____) The CBS television network has announced that it will not broadcast an interview with Mae West that was videotaped for the program, *Person to Person*.

53. (_____) The advertising agency for Camel cigarettes does not give approval to scripts containing the word, "lucky."

54. (_____) As a courtesy to the Schick razor company, sports announcer Lindsey Nelson was reminded by his producer the day before the Syracuse-UCLA football telecast not to mention the fact that NBC would televise the Rose Bowl and Sugar Bowl games during the quarter sponsored by Schick razors since Gillette was sponsoring the two bowl games.

55*. (_____) Viewers in Syracuse do not get to see the NBC-TV program, *Meet the Press*, because the management has decided to present feature films instead, which research shows attract larger audiences.

56. (_____) A slip-of-the-tongue by an actor on NBC-TV on a live program resulted in "bastard" being heard by listeners in the Eastern and Central time zones; but NBC-TV carefully edited-out the unexpected words of one routine in the videotaped repeat for the Western time zone.

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* Included in the Final Examination for analysis on a delayed recall basis. Also measured as part of a 5-item post-test following Experiment 2.

QUESTIONS MEASURING CRITICAL THINKING ABILITY ADMINISTERED AS PART OF QUARTERLY TEST AFTER EXPERIMENT 3

1*. The television commercials starring Bert and Harry Piel and Jack Benny and the Sportsmen Quartet should properly be classified as
☐ 1. entertaining
☐ 2. purposive
☐ 3. insignificant
☐ 4. educational

2. A television program which consists of a lecture designed to point up the basic advantages of a free enterprise system of broadcasting over other forms of broadcasting should properly be classified as
☐ 1. entertaining
☐ 2. purposive
☐ 3. insignificant
☐ 4. educational

3. A commercial which utilizes animated cartoon figures and an explanation of how to remove "sludge" from automobile engine cylinders should properly be classified as
☐ 1. entertaining
☐ 2. purposive
☐ 3. insignificant
☐ 4. educational

4. A rule of thumb for producing network shows is that production costs should be
☐ 1. one-half of the time costs
☐ 2. equal to time costs
☐ 3. twice the time costs
☐ 4. written off through replays

5*. Educational programs are best if they are
☐ 1. void of advertising
☐ 2. significant
☐ 3. planned
☐ 4. controversial

6. A course in Oriental Traditions would be classified as
☐ 1. education for society
☐ 2. education for living
☐ 3. cultural education
☐ 4. controversial programming

7*. Television newscasts can be classified as
☐ 1. education for society
☐ 2. education for living
☐ 3. cultural education
☐ 4. controversial programming

8*. A telecourse in chemistry is an excellent example of
☐ 1. education for society
☐ 2. education for living
☐ 3. cultural education
☐ 4. in-school programming

9*. We can say that the purpose of the *forthcoming* Democratic National Convention coverage on television will be
☐ 1. instructional
☐ 2. highly significant
☐ 3. controversial
☐ 4. educational

10. If a local television station carries programs like "Sea Hunt," "77 Sunset Strip," and "The Lawman," advocates of "great" television would be liable to say:
☐ 1. "This station should eliminate these programs if it is to be considered 'great'."
☐ 2. "Programs like these are fine, but should be given no more than four hours per day of broadcast time."
☐ 3. "There is nothing basically wrong with these programs as long as they are in their proper proportion."
☐ 4. "The networks have forced this station to carry these programs; therefore, it's the networks that are really to blame."

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* included in the Final Examination for analysis on a delayed recall basis. Also rescored as part of a 5-item post-test following Experiment 3.

QUESTIONS MEASURING CRITICAL THINKING ABILITY ADMINISTERED AS PART OF QUARTERLY TEST AFTER EXPERIMENT 4

1. Television programming could best be improved by
☐ 1. encouraging the better programs by calling attention to them
☐ 2. discouraging the poorer programs by calling attention to them
☐ 3. weeding out those who are engaged in deceptive practices
☐ 4. conducting hearings with the Legislative Oversight Committee

2*. Which one of the following programs would not be classified as a documentary?
☐ 1. a report of the public school situation in a community
☐ 2. a program dealing with the manufacture of automobiles
☐ 3. coverage of the winter Olympics
☐ 4. an exposé of political corruption in a city

3*. Which one of the following would probably adapt most easily to television?
☐ 1. an opera
☐ 2. a novelette
☐ 3. a ballet
☐ 4. a narrative poem

4. Musical programs presented on television which are most worth saving in libraries should be the programs which
☐ 1. receive the highest ratings
☐ 2. are primarily composed of classical music
☐ 3. represent the best cross-section of musical taste
☐ 4. have education as their basic purpose

5. Which one of the following problems is best dealt with on the local level?
☐ 1. flood control
☐ 2. crisis in the Middle East
☐ 3. the American high school
☐ 4. income tax structure

6*. When compared with newspapers, television's special value as a spot-news medium lies in its ability to provide (select wrong answer)
☐ 1. an understanding, from showing us the literal truth
☐ 2. an immediacy, from showing us events as they occur
☐ 3. a vividness, from showing directly the people responsible for making history
☐ 4. a comprehension, from showing us details of an event in perspective

7*. In terms of the primary purpose of *presenting information*, select the alternative *least like* the others.
☐ 1. newsreel coverage of the visit of a foreign dignitary
☐ 2. the lead story on page 1 of a newspaper
☐ 3. a radio broadcast of a political convention
☐ 4. a television program explaining the problem of segregation

8. The fact that one-half of the population has not yet gone to high school suggests
☐ 1. that broadcasters have an obligation to present more public affairs programs
☐ 2. why more educational courses should be seen on television
☐ 3. why so many inconsequential entertainment programs are on the air
☐ 4. that Americans are poorly educated as a nation

9. Which one of the following campaigns would do more toward upgrading the quality of the products of the mass media?
☐ 1. a drive to stamp out obscene magazines
☐ 2. federal legislation outlawing payola
☐ 3. a community boycott of newspapers that feature stories that stress sordidness and sensationalism
☐ 4. a "thank you" note petition within a local community for a well done local program

10*. If the Syracuse University library were to establish a section of its archives for television kinescopes and videotapes, which of the following criteria should you use in selecting those programs to be saved? (select wrong answer)
☐ 1. the results of the yearly "Emmy" awards
☐ 2. the Nielsen and ARB ratings
☐ 3. the results of a forum discussing outstanding local programs
☐ 4. recommendations of TV critics, such as Jack Gould and John Crosby

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* Included in the Final Examination for analysis on a delayed recall basis. Also rescored as part of a 5-item post-test following Experiment 4.

ESSAY QUESTIONS MEASURING CRITICAL THINKING ABILITY ADMINISTERED AS PART OF FINAL EXAMINATION

1.

SITUATION:

A Congressional committee is inquiring into the relationships between stations and networks, the government, and the public, and you are asked to appear as an expert in the field of broadcasting. You are challenged with the following:

> "America was founded on the principle of freedom. The people are free, and so must be the broadcasters. Any government intervention would be a contradiction of basic American tenets."

REQUIREMENT:

Outline your answer to this statement, in which you show that there is more to the American philosophy than just the word, *freedom*, and that broadcasters are in a unique position.

2.

SITUATION:

"Censorship", as judged by recent comments, is a complex matter. For example:

The *First Amendment* says that "Congress shall make no law . . . abridging the freedom of speech or of the press"; but Ralph McGill, publisher of the *Atlanta Constitution*, has doubts as to the amount of protection enjoyed by television.

NBC said it had the right to "edit" the *Jack Paar* show in the interests of good taste. Paar cried "Censorship."

Former chairman Doerfer claimed that if the FCC was permitted to compare a station's performance with its original promises, this would constitute "censorship."

Harry Skornia, president of the *National Association of Educational Broadcasters*, recently called for broadcasters to use standards not dictated by commerce, or minorities, or pressure groups.

C. James Proud, president, *Advertising Federation of America*, has complained that restriction on billboard advertising on federal-aid highways is a form of censorship.

REQUIREMENT:

Give a workable definition of censorship in the mass media.

Describe the various kinds of censorship with which the broadcaster is constantly confronted.

Suggest useful principles upon which one may make censored decisions.

3.

SITUATION:

You are Program Director of a new commercial television station in a New York State market that has never before been exposed to television. Yours is the only station in the area; there is no competition. You are broadcasting on a limited schedule from 8:30 p.m. to 10:00 p.m., five nights a week. You may present whatever program schedule you please, but must build the schedule from a limited list of programs that are available for showing in your market. (Descriptive list of 40 TV programs distributed from which student made selections.) You decide to present ten programs per week regardless of length of program.

REQUIREMENT:

Keeping in mind certain principles discussed in the course, from the attached list of programs select the ten (10) programs that you would present in order to make available to your community a "great" television program schedule.

4.

SITUATION:

The Syracuse University Library plans to purchase copies of several outstanding television programs for its Archives. You have been asked to recommend programs that you have seen during the past twelve months that should become a part of this permanent collection.

REQUIREMENT:

Write a letter to the Director of Libraries recommending one program, and giving detailed reasons for your recommendation.

ATTITUDES TOWARD BROADCASTING

We want a frank picture of what the public is thinking about certain broadcasting problems. This is not a test, but instead a piece of research being carried on by the Syracuse University Television and Radio Department. You will not receive a grade, but the results of the research will eventually be available. All answers will be treated as ABSOLUTELY CONFIDENTIAL.

This attitude study consists of twenty statements. You may STRONGLY AGREE, tend to agree, tend to disagree, STRONGLY DISAGREE, or be undecided, don't know, or not ready to express an opinion.

DIRECTIONS: Opposite each of the following comments put one check, marking it under that heading which most nearly represents YOUR OPINION of the comment.

STRONGLY DISAGREE	tend to disagree	undecided don't know	tend to agree	STRONGLY AGREE	
( )	( )	( )	( )	( )	1. "Rock 'n' Roll" music is poor public service.
( )	( )	( )	( )	( )	2. The more intelligent members of a society do not need education and training as much as the less intelligent.
( )	( )	( )	( )	(x)	3. Television has been responsible for some great moments in entertainment.
(x)	( )	( )	( )	( )	4. The average person has no influence in television programming.
( )	( )	( )	( )	(x)	5. It is deceitful to use recorded or canned laughter on television programs.
(x)	( )	( )	( )	( )	6. The real burden of democracy is on those whom we put in power.
( )	( )	( )	( )	( )	7. Broadcasting today is big business, and if broadcasters devoted more time to presentation of serious information their profits would be cut.
( )	( )	( )	( )	(x)	8. The mass media should be careful to report both facts and opinions.
( )	( )	( )	( )	(x)	9. The greatest enemy of broadcasting is indifference on the part of the listener.
(x)	( )	( )	( )	( )	10. Human nature is such that we can never educate people to face the challenges of tomorrow.
( )	( )	( )	( )	(x)	11. Broadcasters who present only popular music programs should be forced by the government to improve their schedules.
(x)	( )	( )	( )	( )	12. Maybe some quiz shows were rigged, but that's show-business.
( )	( )	( )	( )	(x)	13. Broadcasting in this country has a great amount of prestige.
( )	( )	( )	( )	(x)	14. A broadcaster should not be allowed to use his facilities as he sees fit.
(x)	( )	( )	( )	( )	15. When a person lives as a member of a free society, he need not be responsible to anyone.
(x)	( )	( )	( )	( )	16. Television is primarily for relaxing; we can get information from the other mass media.
( )	( )	( )	( )	(x)	17. If guests on an interview program such as *Person to Person* are rehearsed before the program, the public should be informed of the fact.
(x)	( )	( )	( )	( )	18. Living in a democratic country is easier than living in a country of any other type of government.
( )	( )	( )	( )	(x)	19. As a group, the American people deserve whatever programming they get.
(x)	( )	( )	( )	( )	20. Whatever interests the public is in the public interest.

Please complete the following:

Name ______________________ Date________ College ______________________ Year ______

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STRONGLY DISAGREE	**tend to disagree**	**undecided don't know**	**tend to agree**	**STRONGLY AGREE**	**DIRECTIONS: Opposite each of the following comments put one check, marking it under that heading which most nearly represents YOUR OPINION of the comment.**
( )	( )	( )	( )	( )	**1. There is nothing really wrong with the practice of censorship.**
(x)	( )	( )	( )	( )	**2. The American public is in pretty general agreement as to what constitutes poor taste, obscenity, crudity, etc.**
(x)	( )	( )	( )	( )	**3. Generally, the more people involved in producing an art work, the higher the calibre of that work.**
( )	( )	( )	( )	(x)	**4. Most sponsors are scared to offend anybody for fear people might not buy their products.**
(x)	( )	( )	( )	( )	**5. A censor should not remove material from a play merely because it is derogatory to a particular race.**
( )	( )	( )	( )	(x)	**6. Broadcasters are too cautious and give in to sponsor demands too easily.**
(x)	( )	( )	( )	( )	**7. In a free society, an author's work should not be suppressed no matter what his intent.**
( )	( )	( )	( )	(x)	**8. Advertising agency men care little about the artistic aspects of their television programs.**
( )	( )	( )	( )	(x)	**9. A magazine picture that emotionally arouses a normal person should be banned.**
(x)	( )	( )	( )	( )	**10. The subject of censorship doesn't particularly interest me.**
( )	( )	( )	( )	(x)	**11. Broadcasters of our nation do not spend enough time presenting educational programs.**
(x)	( )	( )	( )	( )	**12. Education belongs in the schools, not on television.**
( )	( )	( )	( )	(x)	**13. Without sponsored programs, we would get a pretty low grade of entertainment.**
( )	( )	( )	( )	(x)	**14. In a free society, educational television should not be forced on the people.**
(x)	( )	( )	( )	( )	**15. When you come right down to it, entertainment programs are not really a *vital* part of our programming schedules.**
(x)	( )	( )	( )	( )	**16. With all the money in the world, educational television would still be pretty dull.**
( )	( )	( )	( )	(x)	**17. Commercial broadcasting makes a substantial contribution to the American way of life.**
(x)	( )	( )	( )	( )	**18. Program balance is no great problem in most sections of the country.**
( )	( )	( )	( )	(x)	**19. Between the hours of 8 and 11 in the evening, the television audience is being fed a diet that tends to insulate it from the realities of the world in which it lives.**
(x)	( )	( )	( )	( )	**20. It is a waste of our resources to present programs that appeal to only a handful of people over a mass medium such as television.**

Please complete the following:

Name ________________ **Date**________ **College** ________________ **Year** ______

ATTITUDES TOWARD BROADCASTING

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DIRECTIONS: Opposite each of the following comments put one check, marking it under that heading which most nearly represents YOUR OPINION of the comment.

STRONGLY DISAGREE	tend to disagree	undecided don't know	tend to agree	STRONGLY AGREE	
( )	( )	( )	( )	(x)	**1. Life is a mixture of many things and television should reflect the mixture.**
( )	( )	( )	( )	(x)	**2. Payola reflected evil within the social structure that was not limited to TV.**
(x)	( )	( )	( )	( )	**3. Praise brings more bad than good; more imitation than creation.**
( )	( )	( )	( )	(x)	**4. Good television programs should be available for continued use.**
( )	( )	( )	( )	(x)	**5. Every station should be required to present to its community an annual report of service.**
(x)	( )	( )	( )	( )	**6. With few exceptions, current musical programs on TV are having a degrading effect on American musical tastes.**
( )	( )	( )	( )	(x)	**7. Television is no more evil or amoral than the publishing business.**
(x)	( )	( )	( )	( )	**8. Television is too one-sided, and does not provide its audience with enough variety of experience.**
(x)	( )	( )	( )	( )	**9. Dramas on television are basically mass entertainment, and should not be expected to be great art or carriers of a "message."**
( )	( )	( )	( )	(x)	**10. Those who criticize TV the loudest would do well to note their own shortcomings first.**
( )	( )	( )	( )	(x)	**11. Locally imposed standards would encourage better local programming.**
(x)	( )	( )	( )	( )	**12. We should not waste time with inconsequential programs such as mysteries.**
( )	( )	( )	( )	(x)	**13. Today a library built solely on print is totally inadequate.**
(x)	( )	( )	( )	( )	**14. The quality of *local* television programming has improved very little in recent years.**
( )	( )	( )	( )	(x)	**15. Viewers will get better television from praising good programs than from criticizing poor programs.**
(x)	( )	( )	( )	( )	**16. The best in television simply does not measure up to the best in books or art.**
( )	( )	( )	( )	( )	**17. It's not TV "ratings" that are at fault, but the uses to which they are put.**
( )	( )	( )	( )	( )	**18. Ratings are basically inaccurate.**
( )	( )	( )	( )	( )	**19. The networks should be held responsible, by law, for the programs they originate.**
( )	( )	( )	( )	( )	**20. Ratings are a necessary evil.**

Please complete the following:

Name ______________________________ **Date**________ **College** ______________________ **Year** ______

APPENDIX B

VERBATIM TRANSCRIPTS OF EXPERIMENTAL LECTURES BY EXPERIENCED TEACHERS

NOTE: The reader is reminded that the first three of the following four lectures were delivered extemporaneously before a television camera without manuscript and with few notes. Except for some punctuation based on the sounds of the speakers, the lectures have *not* been edited to conform to literary style, but are printed exactly as delivered. Unfamiliarity with the nuances in the manner of speech of the teachers may present some difficulties as one reads the transcripts.

FREEDOM AND RESPONSIBILITY IN BROADCASTING

Charles A. Siepmann | New York University

(SEATED ON EDGE OF DESK)

This, when you come to think of it, is a unique, and for me, a rather poignant occasion. I'm with you for the first and probably the last time in my life. Ahead of you are weeks of study. All of you will be concerned with broadening your knowledge and understanding of broadcasting as a force and a function in our society, whether as practitioners or as consumers. Ahead of me is a brief half-hour in which I'm asked to try and spell out for you the meaning of two tremendous words, freedom and responsibility. I'm going to try and use those words to help you get perspective on yourselves, on broadcasting, and on the relationship between the two.

Now, perspective isn't easy. Most of us go through life with blinkers on. We see what's immediately ahead in our immediate environment, and we think that's all there is. There are people who are not aware of history. They don't believe that history lives on, that they are part of history. And there are people, likewise, whose vision is broader; but it becomes confused because the vision they now have embraces so much that they can't, as we say, see the forest for the trees.

Now, in this situation, sometimes an analogy helps. Let's forget ourselves, and stand back from ourselves, and see whether an analogy helps to clear the picture. In the context of you and of broadcasting, consider something quite different. Let's think of a new, huge, fast transatlantic liner. Let's call it . . . let's christen it . . . the U.S.S. "TV". Now, before we can launch that ship, we've got to train a crew. The crew comprise an awful lot of people. Captain, First-Officer, Engineer, right down to Stewards and other people in relatively minor roles. But the moving of that ship depends on the work of each and all of those people. Before we can put those people on board ship, we've got to train them. And in the process of that training, and as they come through it, something happens. When they emerge, trained members of that crew, they have acquired freedom . . . freedom at least in one very important sense of the term. I'm talking of freedom, now, as the release of latent energy and power . . . *the release of latent energy and power*. What did I mean? You can think of it in a dozen references. Think of a child learning to walk. It can't walk until its latent energy and power has brought control over its limbs. That crew . . . its latent energy and power was trained, and the power that they derived from it was the latent energy and power of an individual to function in a field. Education—you students, the courses that you'll be taking here are again an aspect of freedom. They will make you free by the enlargement of your knowledge, by the broadening of your horizons, by the training of your mind; and these will bring you power. And, of course, the major problem in life is: How do we exercise the power we get?

Well, with this image of the liner in our minds, let's turn now and talk directly about freedom and responsibility in broadcasting. Freedom and responsibility are affected, always, by time and circumstance, and by the context in which they are exercised. I want to prepare you for the journey of the mind that you're setting out on by setting up certain signposts over the terrain you're going to traverse, to help you find your bearings, get your perspective, and insure that your direction heads toward the goal. This means that I think you've got to understand certain aspects of broadcasting that affect our decision as to what is the appropriate freedom and responsibility we can claim of it.

One! . . . I might start talking about broadcasting in terms of the extent of its power. This is an engine or instrument of tremendous power. I don't have to tell you that broadcasting is pervasive in its reach in the sense that it reaches out to just about everybody. There's not a man in this country who isn't potentially within the range of this medium. It has tremendous prestige. It affects people's minds, their feelings, their attitudes; it absorbs, as we know, the bulk of their leisure. The extent of its power is directly related to our determination of what kind of freedom should it have, and what kind of responsibilities should it have.

Now back, for a moment, to that liner. The crew, I said, by being trained, reached to freedom. But I haven't said something, there, that is important. When they're on board, passengers will come on board . . . thousands, and over the years, millions . . . and those passengers will each come on board with a destination in mind of their own decision. They want to go places. You've got to carry them.

Now, to freedom, their freedom, is now added responsibility. As members of the crew, the crew will have to take care of these passengers, feed them; take care of their comfort, their amusement while they're on their journey. And they have an even greater responsibility; namely, to carry those passengers as swiftly and safely as may be to the destination of their choice through shoals, past reefs, through fog-banks, maybe through hurricanes. This is a responsibility.

Now we have freedom and responsibility associated with one another, and this is enormously important to grasp. You can't, in fact, talk sensibly about freedom other than in reference to responsibility. Freedom without responsibility is license. It can do infinite harm to the person who has it, and to others around him. Freedom and responsibility in broadcasting are thus associated, and certain circumstances and considerations affect their use.

I've spoken of the extent of the power of broadcasting. Now I have to talk about something else. Like every engine of great power, broadcasting is ambivalent in its power to affect people. And, by ambivalent, I mean that it's like a two-edged sword—you can swing it this way . . . you can swing it that way.

Broadcasting is a power for good, or a power for evil, as we use it. Take the analogy of nuclear energy. Here is a power, a force which we hope we will eventually use for the betterment of mankind. We know that if we misuse it we can destroy mankind. I don't think it's any exaggeration to say that broadcasting potentially is an engine of power as great as nuclear energy because it operates, as I've already said, on people's minds and feelings, and affects them in their living. The extent of television's and radio's power, the ambivalence of that power, brings us now to a third consideration.

When you have power of this order, it has to be controlled. Lord Acton, a great scholar and historian, said, about a hundred years ago, something that we must all remember: "Power tends to corrupt, absolute power tends to corrupt absolutely." Now let's go back for a moment into history. Let's go back to the founding fathers and the creation of this country. Our Constitution, our way of life, our political organization are all centered on the recognition of the danger of the abuse of power. In those days the only center of power that seemed great and threatening was government. Read our Constitution and see how we have circumscribed the power of government to control us. But times have changed. Changed in ways our founding fathers could not anticipate and would be amazed to see. In the years since, power has spread beyond government into industry and into civil institutions. But the principle of control of power still applies, and, ironically and almost paradoxically, what we have to do is extend the power of government as a countervailing force against the abuse of power as it resides outside of government. The Communications Act is an example. The Communications Act, which has determined the pattern of broadcasting, is an Act that provides for broadcasting to be developed on a free basis of competitive enterprise within a framework of government regulation. The FCC is there to hold the reserve of power against the possible abuse of power by broadcasters.

To what extent should the FCC or any other agency of Government exert power? Is there any principle that we can name that roughly would guide us in determining the extent proper through governmental power as a countervailing force? I think there is. I think we can say this: that in whatever reference of power outside of Government, the exercise *by* government of power should be in inverse proportion to the exercise of intelligent and responsible leadership by those outside the Government who have that power. It should be in inverse proportion to the exercise of intelligent and responsible leadership by those who have the power. Which means, as those who have the power use it with intelligence, with responsibility, with leadership, we can ask that Government hands be off. But as that power be abused, as the exercise of freedom is divorced from responsibility, the danger signal builds up. And the public interest requires our collective protection from that abuse of power that is latent in the freedom that we have given to these people.

Now let's move on and consider other aspects of the broadcaster in the context of freedom and responsibility. Broadcasting in this country operates in a context far different from that that obtains in many another country. It isn't like broadcasting in the U.S.S.R. It isn't like broadcasting in Spain. Let's go back to the liner. The passengers who came aboard that liner came having booked their passage to a destination. We have a destination and the destination is to realize the goal of democracy. I guess I don't have to tell you what democracy is though it's a confused word, but there are certain aspects of it that I'd like to underscore as they bear upon this discussion.

Democracy, to me, is the bravest and the most dangerous social experiment that ever man undertook. If you've read Plato you know that he frowned on the idea. He said democracy won't work. Democracy is a dangerous experiment because of the burden of responsibility it throws upon you and me, the individual citizens of this country. What is it dedicated to? It is dedicated to the nurture and protection of individuality. That's what our democracy means. Individuality—freedom to find yourself. This is dangerous. The hazard of democracy is that it involves a burden of responsibility on our part to acquire knowledge, sober judgment, and a participant interest in affairs which alone can make democracy work as we, after all, determine our own governors and determine the policies that they shall pursue.

In a democracy there are three dangers always present. I call them the three "I's." You can measure the health or unhealth of democracy by the extent to which you can find, among people, the presence of Ignorance, Indifference, and Inertia. As there are those who are Ignorant, and Indifferent, and Inert, Democracy just won't work; it'll fall to pieces. We've got to reverse those three "I's" and have people who have knowledge, who are active, and who have concern for public affairs. You see what we've done. In effect, we've said to ourselves, "We, as a nation, have decided to get to heaven or hell on our own steam and not under escort." It's a brave thing to say, it's a hard thing to realize. How can we acquire the necessary knowledge for participant concern and active participation in our democracy? Actually the modern mass media of communication are the means and the necessary means for feeding to us the knowledge on which we can base our judgment.

Broadcasters among the media constitute, therefore, not a convenient luxury, but a need. Their services are necessary to the fulfillment of our function as voters in a democracy. They must feed to us the information of events. They must present to us the arguments and opinions that responsible people hold on public issues, so that with that knowledge, thus informed, we can decide and we can act as we drop our vote in the booth at election times. This is an aspect of our time that I think characterizes broadcasting and affects our notion of freedom and responsibility that it carries. We need it, and in needing it we have a right, I would claim, to the services that subserve our needs as members of a democracy. That's one aspect of democracy, and there is another that I'd like to talk about.

In a democracy, I think there is an inherent belief that an individual is sacred. We are ends in ourselves, not to be used for other persons' ends. To exploit the ignorance, the credulity or the weakness of an individual, to use another individual for purposes of our own, is obscene. This is blasphemy in the context of democratic faith. How many of us realize that and care sufficiently about it?

Do you remember that scene in "Hamlet" where Rosencrantz and Guildenstern have been sent to try and get out of him the secret of his strange behavior? It's the scene with the players where they're preparing for the play, and as they try and wheedle his secret out of him, Hamlet gets aware of the fact and turns on them, and seizing a flute from one of the players, he passes it to Rosencrantz and Guildenstern and says: "Can you play upon a pipe?" and they say, "No I can't" and he says, "Oh, it is a simple instrument, play upon it" . . . and when he's got them as awkward as he wants, he rounds on them on these words: "Why, look you how unworthy a thing you make of me. You would play upon me. You would seem to know my stops. You would pluck out the heart of my mystery. You would sound me out from my lowest note to the top of my topmost and there is much music, excellent voice, in this little organ. Yet cannot you make it speak? 'Sblood, do you think I am easier to be played upon than a pipe? Call me what instrument you will, though you can fret me, yet you cannot play upon me."

Where are the Hamlets of today? How many of us are conscious of exploitation as it occurs? How many of us are enraged to the point of true indignation as we observe it in action? Think of this in the context of broadcasting. Try and determine as you pursue your studies, instances of exploitation that seem to you unworthy, and let those be part of your decision about the extent to which those at the controls of this great medium have honored the stewardship that we have entrusted to them.

Now let me move on to another aspect of freedom and responsibility in broadcasting. I have spoken of the democratic context. Now I want to talk about the context of our times. These, heaven knows, are strange and troubled times. There's dirty weather coming up. I don't think many people realize how dirty that weather is and what a challenge we face. We are, in effect, running a race against time, and in that sense, our generation is unique in history. In the past, people have always had the chance to mend their ways, to knock their heads against the wall and learn from their own stupidity; and that's the way Nature has taught us mostly down the pages of our history. But times have changed. We don't have time any more to fool around. Think of a context I've already referred to on nuclear energy. Has it ever occurred to you that this generation is unique . . . in one frightening respect? Do you realize that you and every other person on this earth cannot claim a certain life expectancy beyond the intake of one thousand breaths? There's not a man alive today who can count on being alive the other side of one thousand breaths. Why? Because that is the time it takes to shoot a ballistic missile with a nuclear warhead from point A to point B anywhere on earth. That's one context where we are running a race against time . . . the mastery of a degree of conscience and intelligence as it relates to the potentialities, the ambivalence of nuclear energy.

But it is not the only context. Modern technological society requires such trained minds, the development of such skills on so wide a scale that it's going to tax our strength to meet its demands. Whitehead made the point thirty years ago and warned us. What he said was this: "In the conditions of modern life, the rule is absolute: The race that does not value trained intelligence is doomed." This is a living fact. We'd better face it. Put that in your pipe and smoke it and consider that as a context of freedom and responsibility in broadcasting.

And now to conclude. Freedom and responsibility have reference to broadcasting in the senses in which I have tried to talk to you so far; but there is one danger in this talk. Don't let's fool ourselves that this freedom and responsibility belongs to the broadcasters alone. Broadcasting is an instrument for use and only an instrument. It's not only the broadcasters who determine the flow of broadcasting. The listener, the viewer, has responsibility *and* freedom there. So what I have to say now has reference to freedom and responsibility as related to you and me and the rest of us all together.

The destinies of broadcasting are in our hands. It's true that if my arguments are right, we have certain claims upon responsibility, on leadership and on intelligence on the part of those at the controls of broadcasting. But that doesn't give us an out. It gives us no alibi. Our intelligence, our sense of responsibility is ultimately the determining factor of what broadcasting will become. And as we address ourselves to that question, I think we have means of deciding about ourselves, our relation to others, and our contributions to broadcasting and to the culture of which we are a part.

Let me put a question to those of you who are headed for a career in broadcasting. You, in these next years, will acquire the skills that give you the power to operate this instrument. To what end? To what policies will you subscribe as one of the crew of USS TV? And when will you say, "In this I have no part"? Let me put it simply and bluntly: as you prepare yourselves for broadcasting, as professionals, ask this question first, before you enter it, and let it stay with you every day you are in the business: How much of yourself are you prepared to sell? That's one question.

And here's another question that is as broad as life itself and I think may be the determinant of our future, as it certainly should be the determinant of policies that characterize broadcasting in the future. I suggest to you that one measure of the health of a civilization is the proximity of the standards that a man honors in his private and public life. Fix a quiz program; be a meatpacker and cheat the housewife; play tricks of that order; provide a call girl for an influential client on a Saturday; and go home on a Sunday and take your children by the hand and head for church; and I say to you that you represent the house that divided against itself cannot stand. Think of broadcasting in that context, too. One measure of the health of broadcasting, of the reliance that we can have on the men at the controls, is the proximity of the standards that they honor in their private life as they transfer these to their public duties. This is another measure.

And, as you go ahead on your journeys of the mind in this and other courses, let me recite lines, by way of a conclusion, that perhaps will stand you in good stead, and will be a talisman that you can hold and clutch in your pocket, and perhaps determine thereby whether you're headed straight or headed crooked. All of us, I think, in life, are headed into experiences and activities which involve a choice. And let's remember that life and civilization are merely the reflection back of you and me as we contribute to life. How do you look at life? What do you look to get out of it? What do you expect to contribute to it? Well, Bernard Shaw gave us two standards for judgment here, of what constitutes the true, the rich, the full, the happy life, and these are his words: "This is the true joy of life: the being used for a purpose, recognized by yourself as a mighty one; the being thoroughly worn out before you are thrown on the scrap heap; the being a force of nature instead of a selfish, feverish, little clod of ailments and grievances, complaining that the world will not devote itself to making you happy." And also, "The only real tragedy in life is the being used by personally minded men for purposes that you recognize as being base. All the rest is mere misfortune, or mortality. This alone is misery, slavery, hell on earth."

I began by saying that you were headed on a long journey to an unknown terrain. I think you are. I tried—I suggested that I might try—and set up a few signposts that would give you your bearings, that may prevent you from going down blind alleys and down side roads. I've tried to do just that. I hope the signposts will help, and I wish you joy on your journey.

CENSORSHIP IN THE MASS ARTS

Arthur F. Weld | Michigan State University

(SEATED IN CHAIR)

Hello, ladies and gentlemen.

Censorship in the mass arts.

To start things off, I'm going to show you a book (SHOWS BOOK). This is a paper edition of a book by David H. Lawrence, called "El Amante de Lady Chatterley," which is the Spanish for—you know what! And I'm flashing it at you like this for two reasons. One of them is that "Lady Chatterley's Lover," of course, was involved for a long period in the censorship problem. And the other is that this is a paper-back book—Spanish, but still a paper-back book. And paper-backs are one of the largest elements we have to talk about and think about when we're talking about the mass arts.

Now since we are lecturing, after all, let's start off with a couple of definitions. Both of these things, censorship and mass arts, are pretty rough to define, but I think we ought to get some kind of definition of both of them out in front of us, so we at least agree about what we're talking. And let's start with the mass arts, first. I'll propose this definition to you: these are arts which are mass-produced, and mass-distributed, to a mass-audience, and, as it happens also in a great many cases, involve what we might call—mass-creation. That is to say, that moving pictures, which are a good example, are very seldom written by one man, as you know, but by a whole committee of people ("additional dialogue by . . .," you know the kind of thing). Not only that, in addition to the writer, there's a producer, a director, and after they're all through, a film-editor. All of whom have a great deal to do with what actually comes out on the screen.

Now, we're sticking to mass arts today, but, of course, this is a division, you might say, of the whole general field of mass-communications media (and you know those—newspapers, paper-backs as we said, the comic-books, radio, television, and so on and so on. . . .). But we'll be talking chiefly, in fact almost entirely, about the arts today, because—well—the field is just too darn big, otherwise. All right. So much for mass arts.

Now let me try to define censorship this way: The suppression or restriction of public expression. Now, all these words are important, including the word, public, as I think you'll see. For some examples of censorship—gee—I don't have to give you many. "Lady Chatterley's Lover" is one of them. For many years this could not be sold legally in the United States, and I brought this copy in with me from Mexico. The customs guy looked at me real carefully. I didn't know why—except maybe on account of the picture on the cover. But I think maybe it was because it was illegal to bring it into the country and he knew it, but I didn't. I have to say that one! I assume that if that's the case, he let me in because it was in Spanish, and he figured it wouldn't hurt very many people very bad.

Well—suppression or restriction? And let's look at some other kinds of ways here. There's "Lady Chatterley's Lover," "Born Yesterday" (you remember the play)—you may remember or may know, that in the play Billie Dawn has a line: "He don't like me to work in the chorus, because he likes to get to bed early." Well, when the play was adapted for television, that line was changed to: "He likes me to get to bed early." Now admittedly, if you say that in the right way, it can mean just about the same thing as it originally meant. But this is a censorship, you see, something that the author wrote that we didn't get. Some time ago, the moving picture, "Martin Luther," was refused air by a television station in Chicago. Not for the reasons of any pressure brought to bear on the station by any religious group or any other group; they were just scared that they might offend somebody—*censorship!* Similarly, the "Pogo" comic-strip, quite a spell ago, had a series of episodes involving—I guess he was sort of a wildcat character called J. Simple Malarkey, who was supposed to be the late Senator Joseph McCarthy. The Providence Journal, in Rhode Island, objected to the treatment of McCarthy, and refused to print the strip in their paper—*censorship!* (P.S. on that one: For a while afterwards, the cartoon character appeared with a pillowcase over his head because he couldn't show his face in Rhode Island!) Violence in moving pictures is often cleaned out almost entirely before the movie is put on television—*censorship!* When we send films abroad for showing in other countries, there's often a clean-up of the pictures—of the film matter—and often a request for more than actually is performed, because the people, the censor people, in this country think that we ought to put our best foot forward in foreign countries, and not show things abroad like—well—"Grapes of Wrath," or things like that. Well—and so on and so on. . . .

Examples? These have been very isolated examples. Let's see if I can pull them together. And I'd like to organize, for fun here, into what I'm going to call—four different kinds of censorship. And let me talk about those, here. (RISES FROM CHAIR—WALKS TWO STEPS FORWARD—STANDS FACING CAMERA)

I've got to be honest with you. I think I ought to be talking about three kinds. The fourth kind, I'm going to add, more or less, just for fun. In the first place, there is overt censorship, one that's out in the open. Obviously, everybody knows about it. You can't buy this copy of "Lady Chatterley's Lover" in book stores—you didn't used to, of course. "The Moon Is Blue," the moving picture, cannot be shown in such-and-such-and-such cities in this country, and so forth.

Then there is hidden censorship, of which the "Born Yesterday" episode is an example. Just seeing the TV show, we wouldn't know what the line was. We don't know that there has been censorship, there. Rod Serling's play, "Nightmare At Noon," was supposed to be about—was originally about—race prejudice involving a negro and a lynching in the South. The broadcasters were scared about Southern reaction, and the thing wound up on the screens as a story about a vaguely anonymous foreigner in a town in New England. It was still tolerably powerful, but most people think it could have been a lot more powerful if it had been allowed to go as written.

Overt censorship—hidden censorship. Then there's what I would have to call incidental censorship. And it's not a very good word, I'm sorry to say, but it's the best one I can think of to tack onto it. What I'm getting at is this: There are only two television channels in Syracuse. At any given time, 9:30 on a Tuesday evening, you've got a choice of two possible shows you can see. This is more than some places have. My point is: at that time, there are a great many other television shows on the air, including the great many that might be available by network. But you can't see them. Your choice is limited to two. Now, there is nothing bad about this, nothing villainous, that is; but simply, this is a natural, a physical, limitation. You can't see more than the choice of one of those two. Book clubs, when they issue books, are performing a kind of censorship, in a way. If I belong to Book-of-the-Month, in June or May or what-have-you, I spend $4.95 or what-have-you, on such-and-such a book that the club sends me. I don't have that five bucks to spend on another couple of books that, for all I know, I might have wanted more if I had studied into it myself. All right, whose fault? Mine, maybe. But the point is: this is a kind of censorship. I'm not getting a completely free choice. When television-air is as full as it has been at times of westerns, the time left for other kinds of programs is naturally cut down. This reduces my choice. On times when I might want to watch something besides a western, I either can't or my choice, at least, is limited much more than it might be otherwise. Publishers don't publish much poetry—books of poetry—anymore. A little, but not very much. They don't sell. They don't make money. And again, nothing villainous about any of these things. But supposing I want to buy a book of poetry. My choice is limited a great deal more than it used to be. When a television broadcaster, let us say, lowers his budget, cuts down the number of cameras or personnel on a television show, he is almost certainly, therefore, cutting down the production effectiveness of it, which is a kind of censorship. I don't get the impact out of the show that I might have *if*, and so on. This is another kind of censorship that I'm calling, *Incidental*. These are the three then: *Overt, Hidden, Incidental.* But let me add one more that I'm going to call, *Insulting* censorship.

You may have heard about the case of the movie outfit that wanted to make a film of John O'Hara's novel, "Butterfield Eight," and wanted Elizabeth Taylor to star in it. And she wondered why, because the book, she said, was pornographic. *She* said—and nobody responsible said—*Elizabeth Taylor said.* In short, she's telling me that I can't see that movie with Elizabeth Taylor in it. This is all right with me. But listen to the P.S.—that is this: The movie people kept after her, and finally it was settled that she would star in the movie provided, among other things, that she had censor power on the story. So, if I ever do see "Butterfield Eight," by John O'Hara, it is going to be, in effect, by Elizabeth Taylor. This won't kill me, but I don't propose to enjoy it very much. All right, these are the kinds. Now what's the "Why's" on it? Let's think about that a minute. (MOVES TO SIT ON TABLE).

What are the reasons for censorship? Well, the minute you start, as we have, talking about the different kinds of censorship, you're implying various kinds of reasons. But in order to get this manageable, let me pick just one kind: the censorship of obscenity, which is a very important kind; a kind which attracts a lot of attention and a lot of work on the part of the censors (poor souls) and all this. But this is manageable, and I think we can find out some things about it that also apply to other kinds of censorship. What are the tests? And this is another way you might put it: How do you know something is obscene and therefore ought to be censored, or banned, or suppressed, or what have you?

Well, they used to say, "Anything that was not fit for reading by, or not fit for saying in, the company of ladies, was bad and should be censored." (Ladies in the old fashioned sense, now) And then they used to say, "I won't have a book on my living room table that could not be read by my seventeen-year-old daughter without bringing a blush to her cheek." All very interesting. The point is: here, my reading is to be judged by a blushing, seventeen-year-old daughter. I resent that. But to get down to particular cases. A judge in England in the last century, as a matter of fact just a hundred years ago, came out with a definition of obscenity that has subsisted until comparatively recently in that country and in this one. The test was this: If any matter, reading, painting, pictures, and so on, was such that it might corrupt a mind open to such corruption, it therefore should be banned. Now, what he was actually saying, and the way the definition was treated, was to imply that anything that might disturb, arouse, *even* an abnormal, *even* a psychopathic personality, was censorable. It sounds a little strange I think, today, but that was the definition that was used by the court until about twenty-five years ago. And the occasion for the change—and it was a big change—was the case involving whether James Joyce's book, *Ulysses*, should be brought into this country and be allowed to be sold in the country. And in deciding that it could be, the Judge who tried the case, Judge Woolsey, brought out two tests that, for the first time, make some sense that I think you and I can both go along with.

In the first place, he said, "It's ridiculous to talk about the psychopathic personality as a Judge." Let us assume, now, that the person we have to deal with is the *normal* person. A book or a painting, or a picture, or a cartoon, or what have you, that might emotionally or otherwise disturb a disordered character—one that's already upset—is one thing. But if such a book, painting, and so on won't upset or otherwise corrupt—I won't say me perhaps—but let's say a normal person—then it is presumed to be O.K. and not censorable—not banned. . . .

So the normal person: This is his one point, and there were several others. But most important is the statement that you had to judge the book, painting, et cetera, by the *intent* of the creator. If his intent was to corrupt, if his intent was pornographic, the material should be censored, banned, suppressed. If not, no. He said it was obvious that Joyce's *Ulysses* was not produced with that intent; therefore, it could be sold, and so on. Now this brings up one other little point (and still talking about obscenity) and that is the implication all the way through of what we have been saying: that there is a question as to whether obscenity is inherent—is actually a part of the thing, the book, the painting, the words, four-letter or otherwise—or whether it is, as you might say, in the eye of the beholder. Whether a thing is obscene anyhow or whether it is obscene to me because I look at it in a particular way.

In that connection, I think we would have to say that it is in the eye of the beholder. At least it can definitely be shown to be that way in a great many cases.

Let me give you some examples:

A very sober and solemn Chinese gentleman said that to him the rhythms of Sousa's march, "The Stars and Stripes Forever," were almost unbearably sexual. It doesn't hit us that way.

If you should walk in on a Moslem lady in her bath, she would put her hands over her face. Her idea of what ought to be covered up is different from our idea.

Then you probably know the story of the fellow who was being interviewed by a psychiatrist, who was making tests on him. The psychiatrist held up a handkerchief and said, "What does this remind you of?" "Sex, Doctor". "And the fountain pen, what does this remind you of?" "Sex, Doctor", and so on and so on. The Doctor asked him the reason for it, and he said, "Well, you know, Doctor, everything reminds me of sex." This is the distorted character, we have to admit, unless we are making a joke; and again it's in the eye of the beholder, you see. This was his idea.

Now let's get back to the mass arts. I want to say now to you, as you are probably perfectly well aware already, the mass arts are especially vulnerable to censorship for a number of reasons. (RISES FROM TABLE, WALKS, STANDS IN FRONT OF CAMERA). Let's talk about those.

In the first place let's go back to our definition. Take it backwards. We mentioned mass audiences first. Mass audience isn't just a big audience, it is what the folks in the business call a heterogeneous audience, an audience that is extremely varied in all kinds of qualities. Take the matter of education. In your mass audience there are people who have gotten through kindergarten, no further; people who have been through high school; people who have finished college, and so on. All kinds of different levels of qualities, characteristics, and this nature. But the qualities that are general, that are spread through the whole mass, regardless of education, regardless of various other characteristics, are very often apt to be the emotional qualities. And I don't have to say out loud that one of the strongest emotions, this is a very natural conclusion, is of course sex. So that it is very natural—it is almost automatic with the mass arts—to deal with sex. And this, you can see how we are coming around, makes it a natural for serious attention—considerable attention—by the censor people.

Then, the mass production angle of the thing involves the point that the people who do the producing and the distribution are not artists; they are not creative people; they are businessmen. There is nothing wrong with businessmen, but the point is, they not only know nothing—or next to nothing about—they care less about—artistic creative aspects, angles in the books, painting and whatnot that they are issuing. They don't care what is in there as long as they can sell a whole lot of them and make a lot of money. This is one point, obviously. The larger the number and the less they care about what is in them, the more censorable this stuff is apt to be.

Another thing. The mass audience, a great big diverse audience, remember, is bound to include a whole lot of minority groups like doctors who will object to a television show that doesn't make doctors look good; or, like negroes who object to a radio show, or a book, or whatnot, that doesn't make negroes look good; or, people with crossed eyes; or, people who are blind. They even censored the song, "Three Blind Mice," because they were afraid to offend blind people and because the producer and distributor of the mass arts is so concerned about the possibility he might be either attacked by, or at least not have his things bought by, these various minority groups that he is scared to offend anybody; and he won't put anything in there or allow anything in there that might prevent any of these smaller groups from buying what he's selling, or to even be polite about what he is selling.

Then, when you come to the business of the mass creation of these mass arts, if we can say this and get it agreed on real fast, it is inevitable if an art is produced by a committee, by a whole lot of people getting together, that what comes out is almost bound to reflect the guy with the lowest ability on the committee, the lowest amount of creativity, the least amount of imagination, and so on. At any rate, this is generally what happens.

Now, among the mass arts, television, I think we have to say, is even the most vulnerable of these, and you can see why I think that. Let me tell you some others (MOVES TO SIT IN CHAIR). In the first place, it's got all the problems we just finished talking about; but, in addition, it's got some special ones of its own. First place, as we all know, TV is "as expensive as the dickens." Costs are enormous. The producers don't want to take any more chances than they possibly can. This means that they precensor their own material, so to speak. They won't put on shows they are afraid will offend; that will alienate anybody. They want the biggest—the very biggest—audiences they can get. Then, there is the sponsor in there, and he is not involved in any of the other mass arts that we talked about (but, of course, radio). He's got a voice in what goes out, and he isn't interested in the art, either. He is only interested, again, in the largest possible audience. Then, in addition to these two people, there is the agency man. Not only has he no interest in the artistic aspect of a TV performance, like a TV production, but he's got no responsibility to anybody . . . to the sponsor you might say. But the broadcaster is responsible to the Government, to the FCC, and indirectly to you and to me for what he puts on the air.

The sponsor is very much interested in taking some of this responsibility. The advertising agent can't care less as long as he gets 15 per cent. This is not villainous of him. The point is that this is an automatic part of his job, and he affects what happens in plays (the sponsor and agency together, between them). A gas company presented a play about the Nuremberg Trials, and insisted that the words, "gas ovens", be clipped from the sound track, which sort of just made a joke out of that part of the show. The station broadcaster—the closest to the actual delivery, let's say, of the TV show—is another cautious character in here. As a matter of fact, you might even say he's scared, because he could lose his license if he broadcasts anything that offends many people. He could. He doesn't very often. Almost never. But it could happen, and his fear of this loss is a perfectly real one.

So TV is way out there in the salient, so to speak. It is out in the front, there, where it is wide open, not only to being censored from outsiders, in the overt way, but from pre-censoring its own material, in the hidden kind of way. And also, it's got this incidental censorship we were talking about wrapped up in the matter of the limited number of TV channels, and so on.

Well, now, a number—a sizable number, perhaps—of the kinds of censorship that we talked about here are censorships that you and I probably would tend to agree are good. There's nothing that you and I would object about in them. As an example? Well, the horror comic books. I think you and I would agree that it is as well not to make these things deliberately available to youngsters. Whether you and I want to see them is another matter entirely. But the point is: they're aimed at the kids, and I think we might agree that these things ought to be censored.

Most of the movie cartoons that were made in the 1930's had—well—sort of bathroom humor in them. You don't see it any more. You see these cartoons, and these cartoons almost exclusively, on a great many kid shows on TV, but of course all this material is taken out; and I think we would think it ought to be taken out. Then I don't think any of us is going to object very loudly because the censor wants to remove from plays, books, films, and so on, material that is derogatory to any particular race. It could pile up, so that it turns out that the movie people complain that there is no race they can use for villains any more. But still, in an individual case, I think we might have to say that this is probably OK.

But the point is: where do you draw the line? How do you know what is good and what's bad? People keep saying, "This is good," and so on. But this is just a feeling. How can you draw a line? Well, it's impossible to draw a line very well; at least it hasn't been successfully drawn, yet, though there have been a couple of guide lines, so to speak, drawn, and here they are:

In the first place, the courts have said this is all tied with free speech; and here, now, we move from mass arts to mass communications in general. But the whole business is tied up with freedom of speech and expression, as guaranteed by the constitution. And the courts say—have said—that speech cannot be infringed on. Censorship cannot be exerted, *unless* there is *clear* and *present* danger to somebody. Unless it is *obvious* that there is an immediate danger of hurting somebody, material can't be censored. In cases where it can be shown, we find this is different. That's one point. The other one is the matter that I mentioned a while ago, of intent. The courts say if a mass art—or any art—has clearly the intent of pornography (this deliberate purpose is disturbance, corruption, and so on), then obviously it is censorable. If not, no.

Yes, *but*—who says the danger is *clear* and *present*? And who is to judge what the artist's intent was? How do you know? Who can say? Ladies and gentlemen, I am going to say to you that the answer to that is you. You've got to. Here's what I mean: (RISES, TAKES TWO STEPS FORWARD, AND STANDS IN FRONT OF CAMERA). Somebody must make decisions like this. It should be somebody with as much general knowledge, experience of course, tolerance, confidence in democracy, and so on. And, that almost automatically means people with education.

Now, if you're a freshman, right now, and you were to leave school tomorrow, you still would be a more highly educated person than the majority of Americans. This, it seems to me, hands you the baby. You—an educated, tolerant, democratic person—are the person who has got to make up his mind, and make decisions about where the line should be drawn—and should talk, vote, act, (*for or against*), according to these decisions, based on that characteristic that you have. And I don't mean you in a sort of a vague, plural way, either. I mean you, as an individual.

You are the people—are the individuals—who must make yourselves the judges. It's your job.

WHAT IS GREAT TELEVISION?

Eugene S. Foster | Syracuse University

(STANDING AT PODIUM)

As you have heard, our topic today is in the form of a question. This is not a simple question; it is not a question to which there is a simple answer. Indeed, it is a question to which there is no *one* answer, but each of us is going to have to decide for himself the answer to the question, "What is *great* television?"

I'd like in the next few minutes today to talk with you and give you some of my own ideas; primarily, however, to induce you to think for yourself and attempt to answer for yourself: "What do we mean when we talk about *great* television?"

I suspect that each one of you already has some ideas on the subject. I also suspect that if I were to ask you right now to give me the answer to the question, that the answers would all be different, because we are not in the habit of thinking about great television. Sure, we have a pretty good idea of what we mean by great art, by great literature, by great music, by a great football team or baseball team, or what-have-you; but we are not used to thinking of television as being either great or something else. It's just there. Something we kind of take for granted; something we enjoy. So let me this afternoon think with you on what we mean by television and what its various aspects are and see if we can arrive a little bit closer to an answer to this question before the day is over.

I'd like to start out with you by what may seem to you comparatively unrelated, and that is an attempt to classify all television that you might see on the air. In short, not just to categorize the programs, but the segments within the programs; and so if we may go over to the board, (GOES TO BLACKBOARD) let me start out and see if I can give you an idea of how we would go about classifying everything that you might see on TV.

Let us start up here and say that this is all of TV. (WRITES TV) And now what sub-categories do we have? As we come down I think the first one we would hit and the one that we would think of the first because we see so much of it is what we call "entertainment television". (WRITES ENT) This probably constitutes a very *large* percentage of what's on the air maybe 85 . . . 90 per cent. Now what can we say about "entertainment television?" How can we classify it? It seems to me that one way of classifying it is in terms of the purpose of the producer who prepares the program, and I think the best thing you can say about his purpose is that it is designed primarily to enable people to pleasantly kill time. Enable them in fact to so pleasantly kill time that they will choose to kill time in the same way the following week, and thus, will be given an opportunity to see the commercial of the sponsor who pays the bill. They are not interested in changing me, changing you, or any of the other viewers. They are interested in enabling us to pass time; and when I view, let's say, "Gunsmoke," as I try to do on Saturday evenings, once the program is over and I wonder what happened during the thirty minutes to me, the only answer I can give is that I have grown thirty minutes older, and I have enjoyed the aging process. Enjoyed it, in fact, so much that probably next Saturday night I will choose to kill time in the same way; and this is also true of our Ed Sullivan's, our Perry Como's, our sporting events and most of the other programs that we see on television.

Now, aside from the "entertainment programs", it seems to me that we can classify the rest, and in doing so would do it in opposition by saying that "entertainment" is programming which has no desire to change the audience. Over here we have what I would call "purposive television", (WRITES PURPOSIVE) and "purposive" implies that the producer who has prepared this program is interested in changing the viewer. In short, he would like the viewer to be a little different at the end of the program or the program segment than he was before he started. He would like him to have more information; he'd like him to have a different attitude toward something. He'd like him to take different actions; he'd like to persuade him to do something. The one thing we have in common in all "purposive television" is a desire to change the viewer.

Now as we go on I think this point will become clearer, so let's ask what kinds of "purposive television" we have. Well, first and most obvious, and this is what we see the most of, we have commercial (WRITES COMM) purposive television, and commercial purposive television very simply is programming on television designed to change an individual in such a way that a commercial company will be benefited. Thus, we want to change the individual by inducing him to buy more of a certain kind of cigarette, buy a certain kind of automobile or gasoline or soap, to patronize some service organization, such as a barber shop for example, or to buy insurance from a company. The point is this: we are very definitely trying to change him. We have a purpose of change and the purpose will benefit a commercial organization.

Now, over against this it seems to me that we have certain programs and certain parts of programs where there are some things you can say about the purpose. For example, the first thing we can say is that the purpose is significant. (WRITES SIGNIF.) This means that the purpose is important. We're not dealing with things that don't really matter. We're here dealing with things that we think are significant in terms of the viewer and in terms of the society in which he lives.

The second thing I would point out about the purpose is that it is non-controversial. (WRITES N. CONT. UNDER SIGNIF.) And let me stop for just a moment here to remind you of what I just said. I said that the purpose is non-controversial. (WALKS BACK TO LECTERN) This is not the same as saying that the subject matter is non-controversial. For example, if I may give you an illustration of a program that we did here on the campus a few years ago where we had extremely controversial subject matter, but which I still think falls into the category about which we are now talking. I had just returned from an overseas trip and I was informed that a program had been planned out of our studios over one of the downtown stations, and that I was to be the moderator of it. And I found out that this was a discussion program on the Panther Mountain Dam Amendment to the New York State Constitution. Now the Panther Mountain Dam was to be located up in the Adirondacks on the Black River which runs from the Adirondacks over into Watertown. The purpose of it was to hold the water in the spring when the snows were melting and all the rain was falling, to store the water and then let it out during the summer and the fall, during the dry months, so they would have a steady supply of water for hydroelectric power up around Watertown during all times of the year. We had four people who were going to be on the discussion. Two were from the Black River regulating district; these were the people that wanted the Panther Mountain Dam very badly. Two were from conservation groups and they were very much opposed because they said this is going to take away land that currently we are using for wild life, for recreation, and so forth.

I had not been in that room more than two or three minutes prior to the program when all of a sudden I found out that here I had a topic that was so controversial and there was so much difference of opinion between the two sides, that they were never going to come together. I began to worry immediately, could I keep control of the program? As it turned out, I don't think I did too well.

We did reasonably well, but the program was pretty much out of hand at times because the two sides were so violently opposed. Now my point: the subject matter of this broadcast was about as controversial as anything could be, but there was no controversy about the purpose of the program. The purpose, as we had set it forth, was: we want the voters of Central New York to be informed of the pros and the cons of the Panther Mountain Dam, the Amendment on the New York State Constitution. And both sides agree that we do want to inform the audience and so they joined us in the program. The purpose was non-controversial.

Now, (WALKS BACK TO BOARD) as opposed to the purpose being significant and non-controversial, we have two other categories here. The first would be programs or program segments where the purpose is "insignificant." (WRITES INSIGN.) For example, we are trying to change the viewer, but in a way that really doesn't make too much difference. For example, suppose that we decided that we would do a program from Syracuse University designed to teach the average person in Central New York how to read and write Sanskrit. Now Sanskrit may be tremendously significant to certain scholars, but for the average person I think we would have to say this is an insignificant purpose.

And then we have programs whose purpose is "controversial". (WRITES CONT.) That means that some people would say that this is a good purpose and some would say it is not good. For example, if we are trying to persuade people to vote Republican, the Democrats disagree and say that is not a good purpose. Or we're trying to persuade them to be one religious faith; the other religious faiths say no, that is not a good purpose. So you have a controversial purpose. Now coming back over here; whenever you have a whole program or program segment and you can say, and be sure, the purpose of my program is significant; the purpose of my program is non-controversial. I should like, then, to set this aside and say, now we are talking about educational television. (ENCLOSES SIGNIF. and N. CONT. IN A BORDER, & WRITES EDUC. ABOVE) Educational television, where the purpose of the program or segment is significant and where the purpose is non-controversial.

Now, I think perhaps this will have more meaning for you if I may break it down just a little bit and give you some of the sub-categories under educational television. So let's bring our line down and come over here and talk about a kind of educational programming that I prefer to call "Education for Society." (WRITES SOC.) Now this implies that we have purposive television; we want to change the people. We want to change them in a significant and non-controversial way so that we will have a better society. Now, how should people be changed to make a better society? It's comparatively simple to answer that because the studies of political science, civics, and citizenship have been developed so well that we can say, without too much argument, there are three characteristics of a good citizen in the United States today. The good citizen is, first of all, informed. (WRITES a. INF.) He is informed of the issues that face our democracy. And this, after all, is the whole basis of the democratic way of life. We assume that people will know the pros and cons of the issues on which they are called to vote. Also we assume that they will know the good and the bad points about the candidates between whom they must choose at various election times. After we have an informed citizen, next we must have a citizen who is motivated to participate (WRITES b. PART.) in our democratic form of government. In short, the citizen may know all there is to know about the issues and the men, but unless he expresses himself, unless he votes, unless he's on the jury when he's called, unless he participates by paying his taxes, and participating in all of the activities of a democratic way of life, we do not have a strong society. And thirdly, I think we can say that a good citizen is one who is understanding (WRITES c. UNDER.) of those who are different from him. I'm not talking now only about the obvious understanding of a person who is different in race, color, and creed. I'm concerned of a citizen being understanding of those who come from a different cultural background. Those who live in a different social stratum. Those who may have more or less money than he. Those who think differently from him. And so I would say, any program or program segment designed to inform people on the issues of our democracy, to motivate them to participate in democracy, and help them understand people who are different from them is education for society. In other words, we have a purpose that is significant. A purpose which is non-controversial. . . .

The next category I would have of educational programming would be what I would call "education for living". (WRITES LIV.) And this implies that we want to change a person; change him not to make him a better citizen and thus improve our society, but just make him a better person. Now, what kinds of change are we talking about? At this point I shall not give you three quite as neat categories as I did under "society", but I can suggest a couple, and then it will be up to you to expand the list or to change it depending upon what you think makes a good person.

I would start in, though, and say very definitely, I think, that "education for living" first of all implies (WRITES a. VALUES) that we try to give a sense of moral and spiritual values. In short, I think we all agree that people are better if they have a sense of moral and spiritual values. We may be Protestants, but we think a Jew is better, if he has a strong sense of the values that come from the Jewish religion; and I suspect that the Jew feels the same way about the Catholic, and the Catholic about somebody else. In short, we kind of agree: a sense of moral and spiritual values makes a person somewhat better. And so I would say any program which tends to do that I would call "educational". Some people would call it religious, which is perfectly all right, although you could have the same purpose not under the aegis of a religious institution.

Secondly, I think we're pretty much agreed that people are better if they know a little bit about mental health. Let's put down here "psychology", (WRITES b. PSYCH.) simply because that covers the whole field of mental health. I think we're better off if we know what makes us react as we do, and what makes others react as they do; in short: understanding what makes people act and behave and think in the way in which they do. So, we have "education for living", and I think you probably now could expand that list quite a good deal if you wanted to.

A third category that I would put under "educational" is one I put out of deference to a good many classes of students which I have had over the years. Normally, I have stopped at this point, and said, "education for society, education for living." This I think, is the most important part of educational broadcasting. My classes always come up with one more category, so for the last year or so I have included it, primarily because they asked me to, and this is what they would call "cultural education", (WRITES CULT.) and they have made the point—and I think I would not disagree with it—that a person is better if he has (WRITES a—ART, b—LIT, c—MUS) an appreciation of art, literature, music, and the other things that you would put down here under "culture". And so, we have education in terms of imparting certain cultural values.

Finally, there is one other category that I would put out here. I put it out, and it should be a little bit by itself, because it is a unique form of broadcasting. It could include all of the things we have talked about so far. It's what I call "in-school" broadcasting, (WRITES IN-SCH) and this includes those programs that are prepared to be heard by students in the classroom. It could be that we would have some "education for society" in an in-school broadcast. We could have "education for living" or "cultural education", but the thing of it is: we're dealing with a captive audience; we use somewhat different techniques, and so I prefer to put it off here by itself.

Now, what have we done so far? So far, we have tried to categorize what you may see on television throughout the day, and throughout the week, and year. We started in by saying, "Here is all of television. Let's break it down into "entertainment" (the purpose is simply the pleasant killing of time), versus "purposive" (where we are actively trying to change the individual). Under "purposive" we have commercial television (the advertisements that you see); some things which are insignificant; some things which are controversial; and they leave for us over here *purposive television where the purpose is significant, and the purpose is non-controversial,* which I prefer to call *education.* Now, under education, we have education for society, so that we will have a better country in which to live; education for living, so that people will be better; cultural education, an appreciation of the arts; and finally, in-school broadcasting. (MOVES BACK TO LECTERN)

Now, you will remember that when I started putting the chart on the board, I did so after introducing my topic, by saying I had a question I wanted to raise, and this question is, "What is *great* television?" So far, all I have done is tried to tell you what I think television is, and how it may be analyzed and broken down. Now, let me give you *my* answer to the question of "what is great television?" and then permit me to expand on it just a little bit.

It seems to me that great television is that which has the proper balance of all these types we have talked about today, particularly balance of what we call educational programming. This means, when I say "proper balance of all types", that I am sure there is room in our program schedule today, and for years to come, for the entertainment program; the program which has no purpose in terms of change; simply to enable us to pleasantly kill time. You see, we are living today in a very hectic age; a complex age; a life we have that moves very rapidly; and I think if we did not provide entertainment, relaxation, for people in this day and age, probably they would not be able to continue. And so, I hope we will always have good entertainment on television.

Furthermore, I am sure that there will always be room on our television for commercial programming; at least we have dedicated ourselves to a system of television which is financed by advertising. This, I think, is the best for us here in the United States. I have no patience with those who say we should have a government owned and operated system, as do most countries. I have no patience or sympathy with those who say we should have a British Broadcasting Corporation type of system. I don't think it fits in with the over-all philosophy of American broadcasting. Rather, I like the idea of a system supported by advertising, and thus we will always have to have commercials, and there is nothing against them in their proper balance.

I suppose we should always have, also, programs which are controversial in purpose. In short, at election time, we shall want to see programs telling us the best about the Republicans, and giving the Republicans a chance to enlist support. And we will want to give the Democrats the same opportunity. And it is traditional, I think, in America, not just in broadcasting but in anything, that we want to hear all sides of the question. And therefore, we should have programs designed to sway us one way or the other, provided there's a balance.

And then, finally, it seems to me that we should have a great deal more of what I have chosen to call—educational programs. Education, as here used in its broadest sense, meaning: television that is designed to change people in a significant fashion and in a non-controversial fashion, whether it be for society, for living, for culture, or what have you. It still seems to me that great television is that which includes the proper balance of educational along with the other types.

Now, when I say I think that there should be a proper balance, this has two or three implications concerning educational broadcasting. The first implication is, that educational broadcasting must be planned as a vital part of the daily schedule. It is not something we put in as an afterthought. It's not something we tuck in around the edges when we have time that we cannot sell to sponsors. It's not something that we put in late at night, after midnight, or at noontime on Sunday, when there is no particular desire to see something else. Rather, it's a planned effort so that we sit down and look at the whole week's schedule and say—there will be education at this point, at this point, at this point . . . and we put it in our schedule in a planned fashion, rather than haphazardly, as it occurs today.

Not only must we present education in a planned fashion, we must be consistent about our offerings. One of the things that we learn in a university, or in the public schools—you do not teach people very much unless you are consistent, meet them regularly, and give them a proportionate amount of material every time you meet. In short, we would never try to run classes at Syracuse University, planning the schedule from week to week. When we start out in the Fall, or the Spring, or the Summer sessions, we know precisely how many meetings we'll have throughout that term, and the work is well planned ahead. This is what's got to happen in television. We cannot have one week with a lot of educational programming, and then one week with no educational programming. We must be consistent.

Finally, it seems to me that educational programming must be well done. And well done, here, implies that we put somewhat the same amount of effort into presenting our educational programming as we do in our entertainment programming. Unfortunately, in the past, if you were to compare the budget of the average entertainment program with the average educational program, you would find that, for a half-hour, the sponsor has no hesitation at all in paying up to $50,000 for the program material, and then he adds another 50 to $75,000 for the time. $100,000 for a half-hour entertainment program. What happens when we present a half-hour educational program? Too frequently it's done on a budget of one or two thousand dollars, taking advantage of people who are willing to come in and work for nothing, using script writers who are not quite as qualified. And so I say that if we are going to do, successfully, educational programming, then we must be prepared to put as much into it as we do into our entertainment programming.

Thus, it seems to me, that if education is to be properly represented, in the daily schedule and the weekly schedule, it is education that is definitely planned as a vital part of the schedule; it is consistently offered; and it is well done.

Now it seems to me that perhaps the clue to what we're talking about today lies in a definition of greatness—as the ability to do well, day by day, what has to be done. That means that we give attention to the unspectacular—that we face-up to the needs of our people, day by day.

Through the past years we have had examples of programs that were educational, and we said that they were good. And indeed, I think we have seen on American television some of the very finest of educational programs that have been presented anywhere in the world. I think, for example, of the series on CBS called—"The Twentieth Century," or, "You Are There," which preceded it. Or some of the great hour-long programs that have been done by the Bell Telephone Company. Or some of the things that Mr. Murrow has done. Or "Project Twenty" presented by NBC. All of these, it seems to me, are very, very good. And they pretty definitely prove that here in the United States we *do* have the ability to present good educational programs.

Now I say—those are great programs, individually. And we will be able to say (WALKS TO BOARD) that we have a great television system in the United States, when we can look at the overall schedule, and we can see a balance. Keep your entertainment. It must be in the schedule. It's a vital part. Keep your commercials. And I'm sure we must always have something that is insignificant and something that is controversial. But we must begin, on a day-to-day basis, to put into our program schedule a balance of what we consider educational. This is not spectacular. It's not something that we will get great credit for, on a day-to-day basis. But it's the kind of thing that has to be done, if we are ever going to rise above the point that we are today, and be able to say that our television system is a great one. This we must have.

(MOVES BACK TO LECTERN)

I think perhaps what I am saying to you today was very well, and probably much better, said some thirteen or fourteen years ago. This was written about radio. It was in 1947, right after the end of the Second World War. At that time, the University of Chicago was doing a study on radio, and they opened-up the book that they published at the end, with this statement about radio—see how well it fits what we know today about television: (READS CARD) "So much, Man has accomplished. As he faces the future, he holds in one hand the key to universal understanding. In the other, a fragment of nuclear energy, so awesomely destructive, that none would dare to loose it, save through misunderstanding. History will record how Man reacts to this providential coincidence."

SEEING THE BEST IN AMERICAN TELEVISION

Kenneth G. Bartlett | Syracuse University

(STANDING AT PODIUM)

My purpose in the next thirty minutes is to offer three practical suggestions for encouraging better programming in American television. The proposals are offered for discussion and evaluation. In order that you may relate these three principal points of view to the material that I'm about to present, may I review these three proposals, briefly, for you.

The first suggestion is that if we are to encourage better programming, we must first know what is the best. We must know how to evaluate it, and then how to relate it to television's total offering. The second suggestion is that if we are to encourage better programs, television stations should account annually to their viewers on their program stewardship. They would account annually to their viewers in much the same way as banks and educational institutions and industrial corporations now report annually to their stockholders. The third suggestion is that after we have discovered the best, we should then make plans to preserve it in the libraries in order that subsequent generations may be able to see what, in our time, was considered excellent and fine.

I hope that during the next few minutes—that you'll relate the material here presented to these three points of view. In fact, to discuss them avidly, and to determine if they are as practical as I think they are.

My purpose stems from a personal conviction that the best in American television is magnificent; and that we would encourage more of the finer programs if we praised the good more, and invested less of our attention on what is admittedly average or mediocre. As in the upbringing of a child, I am convinced that praise is more effective in producing good behavior than an overabundance of criticism.

This, then, is a short essay on television programming. It's an essay in which I have deliberately searched for the best and have ignored the common or the average. When one does this, I pose the question to you: "What does he see?" How truly consequential is it, and how much of it is worth cataloging and preserving in a college library? How much is worth showing on a repeat broadcast? In short, when you see the best in American television, what do you see? What experiences do you have?

Before answering this question, may I speculate for just a moment on why I was asked to do this particular piece. I suspect that the reason was because for the last 10 years I have served as a judge on most of television's awards. These include the Sylvania Awards, the Alfred Sloane selections, the Peabody, and to a lesser degree, such other awards as the Ohio State and the "Emmies". Once a year, in the last ten, I have spent three days with other judges in a viewing room evaluating television's best programs. And then subjectively selecting the finest in each program classification, and attempting to call public attention to it. Always with the purpose in mind, of course, of singling out the best in order that more public attention might be given to it. It is, in short, a traditional search for excellence. And, may I add, an exciting, although sometimes controversial, experience. The test of a program's quality to a board of judges may I add, is not its rating, nor the public image of the star. It is, instead, an evaluation of how well it accomplished its declared purpose and whether that purpose was significant. It's an effort to evaluate how effectively a given program tells a story. It's an effort to see whether a given program is worth further discussion after you've seen it. And finally, whether it is worth a repeat on-the-air showing. If it is worthy of being found in the library and reshown at a later date, we believe it is worthy generally of being singled out for more public attention. Looked at from this point of view, what, then, are television's great moments? That is why this particular essay is entitled, "Seeing The Best In American Television."

Professor Charles Siepmann, one of the few philosophers of American television, pointed out not long ago that "broadcasting had brought to millions a variety of human experiences hitherto available to only a privileged few." It is to this "variety of experiences" that I would now call your attention.

First of all, let us look at a program classification generally identified as Documentaries.

Television is a communications medium with a unique ability to mirror the world. It can put a camera on life's great and ordinary moments, and in so doing, show men as they really are. It has an "X-ray like" quality that literally penetrates the truth and makes falsehood difficult. At least falsehood over an extended period of time. No other medium of mass communication, in my judgment, does it better. The question is, how well and how frequently television does that which it can do best?

There are not many documentaries on the air, but those attempted are impressive indeed. C.B.S.'s "Population Explosion" was not only realistic reporting of a major world-wide problem, but a forthright and seldom duplicated analysis of the too-frequently buried subject of birth control. The emotional and the intellectual impact of this series was so great that this program series, in my judgment, should be in every major library.

The same may be said of "Biography of a Missile", a program that came at a time when man was desperately trying to solve the problem of putting man into space. In the years ahead, when space flight is routine, we could well use a pictorial portrayal of the problems that preceded this achievement.

Reaching farther back into program history, can a viewer ever forget Marian Anderson's "Lady From Philadelphia" —a deeply moving portrayal of this talented colored lady on a goodwill tour singing to the youngsters of other lands —this at a time when the Communist press was making so much of America's segregation problems. No one can quite adequately describe in words what she achieved in showing the free nations of the world what our fundamental attitude is toward the problem. No one since has so effectively put the lie to Russia's charges of discrimination. This program should, in my judgment, be replayed periodically even to our own people as a reminder of what we truly stand for. This, in my judgment, was America at its best.

Edward R. Murrow's expose of Senator McCarthy was equally effective. . . .

You will recall that he replied to the Senator's disclaimers by actually showing film in which the Senator was heard saying what he was then denying. Never again after this program was shown, did McCarthyism have great prestige or many followers in America. It was truly a high moment in American history . . . a significant time for American television. These programs, I repeat, are not make-believe . . . they are people talking to people in their natural environment. They *are* the mirror of history and as in the instances cited, a study in depth of a significant social problem. These programs are as impressive as books in the matter of teaching and in learning. These and similar documentary programs are illustrative, may I suggest, of television's great contribution to the age in which we live.

Similar to documentaries, but not identical, are the several spot news programs that are shown by television stations in increasing number. The difference, may I add, between the two is that spot news coverage is usually concerned with a single notable event. Often it is shown without editorial comment. On the other hand, the documentary instead is a planned putting together of separate but related items. Often an editorial point of view is expressed. Usually a documentary relates itself to a central social theme. Now as far as spot news coverage is concerned, will anyone question television's capable reporting of the Khrushchev visit to the United States? We saw and heard without substantial editorial comment, a man about whom previously we had only read. We saw his family. We even learned that he had a sense of humor. It was dramatic because it permitted me in my living-room to make my own evaluation and comparison of the man with what I had read about him in the daily press. This *is* what television has added to the dimension of mass media. This is its contribution to our kind of living in the Twentieth Century.

Can anyone forget the American President's trip to the free nations of the world. This trip followed the Khrushchev visit . . . it gave new meaning to history and literally inaugurated the age of *personal* diplomacy. Television recorded it . . . and we not only knew what was happening, but we had a sense of feeling its significance.

We now take for granted that we will see the opening of the Congress, political conventions, the ordaining of a new Pope. As radio brought a new element to newspaper reporting . . . so too, did television add a new dimension to newsreels, to radio and to the printed page. Each in its own way adds to the sum total of the people's right to know. Spot news reporting is a vital part of television's contribution and such programs are as much a part of history as a history book itself.

So much for documentaries and on-the-spot news coverage. It is perfectly clear, of course, television's offering should not . . . and cannot . . . be restricted to those two types of programs . . . nor are these necessarily illustrations of television at its best. Let us go then to the area generally identified as drama. Television is not essentially a serious medium, nor in my judgment should it be. Entertainment too is a very real part of our every day living . . . like a novel, television can tell a story effectively and well. Why then shouldn't it be used to tell a story in which imagination plays a rampant and predominant part. The ability to tell a story is one of television's basic advantages. Maybe this is one of the reasons that we have so many Westerns and "who-done-its." The sheer number of dramas . . . good and bad . . . is testimony to its unique ability as a carrier and as a teller of stories.

Now I make no excuses for the stories that it tells beyond regretting the number that appear to be inconsequential. I view many of these lighter offerings as a television extension of my own taste. For, when tired, nothing is quite as good as a good detective story. It is relief from the tensions of the day . . . and in that sense westerns and "who-done-its" have a justifiable place on the American air. There *is* a place for the inconsequential, if for no other reason than because there are so many of us who like that kind of thing. I would, however, not have it predominate most of the evening or daytime hours.

Within the classification of drama there are in addition to this type story many dramas that are as good as the best you will see anywhere. "The Moon and Sixpence" is one that bears repeating at periodic intervals.

In addition to splendid acting by Laurence Olivier and others, the technique employed two scenes shown simultaneously on the screen in order to permit the individual to see what was happening at a given moment within the play. It was imaginatively conceived, magnificently executed, and is well worth a re-showing. The several productions of Shakespeare by Maurice Evans on the Hall of Fame fall into the same category. Now can anyone deny that these offerings, too, when available would enrich the teaching of drama in the college classroom, enrich the teaching of English Literature in the high school? Too often the study of Shakespeare is confined to the reading of the play. Shakespeare didn't write his plays to be read. He wrote them to be seen and to be heard. Television offers a dimension whereby his best can be shown effectively even within classrooms. In the last several years, I have seen other equally notable offerings: "Requiem for a Heavyweight," "A Man is Ten Feet Tall," "What Makes Sammy Run?", "For Whom the Bell Tolls," "Project Immortality," "Wicked Scheme of Jebal Deeks," and "Little Moon of Alban."

All are illustrations of original scripts, or significant adaptations from literature. Those that were created especially for television are worthy of special note, and in neither instance need an apology be made. Television has learned that the hour and hour-and-a-half program does permit character development. By means of television you can mix appropriate music, dialogue and pictures, all to the end of a well told story. Television, therefore, I suppose, almost better than other media, demonstrates its ability to tell a poignant story. Is it any wonder that we see so many dramas? Seldom has any medium of communication grown and expanded its own service to the extent that television drama has. I submit drama as an illustration of television at its best.

Turning now to comedy, I would, while regretting canned laughter and too many situation comedies, praise those comedians who help us laugh even in the midst of world complications that make man wonder if he has more than a thousand breaths left. A nation that doesn't laugh is a doomed nation, no matter how strong its military force. I would praise, for example, the one remaining clown left in America—Red Skelton. I would salute Jack Benny and others like him. More recently, Bob Hope . . . for these men give us relief from the tensions of the day.

Life is a mixture of many things, and television should reflect that mixture. In the comedy category, I would particularly call your attention to a comedian developed by television itself . . . Art Carney . . . a man whom I have seen render a judging session speechless because everyone in the room was laughing so hard. Since laughter is a part of human personality, I place comedy on exhibit as one of television's finest ingredients, and I do this while acknowledging the fact that a comedian wears out almost faster than any other personality on the air.

In respect to music, it would hardly seem necessary to make very much of a point of what we see and hear. I find, however, so much in music is taken for granted, and I am therefore disposed to call your attention to several magnificent music programs that should be re-shown. May I remind you again of "A Night with Fred Astaire," "Magnificat," created by Robert Saudek, and of course the annually repeated "Amahl and the Night Visitors"—an opera written expressly for television. These, when added to the offerings of Dinah Shore, Harry Belafonte and others, have provided a mixture of tastes that keep American television's musical best from being exclusively longhair. The truth is: television has improved our musical taste. Any one of the programs cited above, in my judgment, is worth repeating, and given the opportunity, I should like to show you examples of each that would be far more effective than to hear me describe them.

So far, most of my examples have come from the networks. One might therefore logically ask, "What of the locally produced programs?" Most of them, I concede, are without great significance. Yet, they do reflect the local community and they are a part of television's grass roots. More importantly, in recent years we have discovered an ever increasing number of locally produced programs that, in my judgment, are excellent. I shall, for example, never forget the series of half-hour programs by an Ohio station that showed what it would be like to be in a mental institution. The camera, in this particular instance, was used as though its eyes were yours. It showed what would happen to you if you were committed, the experience you would go through as you were being admitted, the attendant who would meet you, what you'd eat and where you'd sleep. It concluded with a sharp reminder that one in twelve seeing the program would experience this. As a result of this series, the state of Ohio invested many additional millions in improving its mental hospitals.

Similar programs have been produced on alcoholism and drug addiction, the latter showing the terrifying real life experience of a person as he comes out from under the effects of the drug and tries to resume life's normal functions. I've seen the story of the Civil War told in still pictures taken at the time the war was being fought; so many still pictures, in fact, that the effect when shown on the television screen was one of motion. It was the story of what it was like to be at Antietam and Gettysburg. It added the dimension of art to an already many times told historical study . . . of the one great war that was fought for a truly great purpose.

Local television is simply growing up. With more and more stations recording the best on magnetic tape, it should be possible in the future increasingly for one station to exchange its best programs with another station, thus enlarging its program resources and making each individual station less dependent upon networks and independent producers.

Now one may ask, as we come toward the close of this particular presentation, "What's the significance of these magnificent splashes of variety and quality within television's total offering?" I would answer with the three general observations with which I started this presentation. I would ask again, when this is over, that you discuss them to see how meritorious they truly are.

In the first place, the general image of American television in our general public appears at the moment to be one of a vast wilderness of program mediocrity, of appeal to non-discriminating taste, of patterned programming, of cliches, and sometimes of absurd advertising . . . and of course more recently of respect to fraud with regard to music and dishonest quizzes. Now no one disputes that deceit of any form has no rightful place on the air. Payola and dishonest quizzes are, however, flyspecks of television. They are not, and never have been, its basic ingredient.

Both reflected evil within the social structure that was not limited to television, and should not be identified with television alone. Let no educator indict television for dishonest quizzes without first looking into his own domain. Let no businessman charge television with dishonest promotion of music without first looking into some of his own methods of marketing.

If there seems to be too much of the common, let us not forget that half of the population hasn't yet gone to high school, and they too have their rights for entertainment. I do not argue that these negative images are all wrong. I do protest that the point of view is too often one which puts an emphasis on the ordinary and the common, and too little emphasis put upon the good. No one has suggested that book publishing is bad because the newsstands are filled with junk. No one has yet suggested that newspapers and magazines are of little value because they emphasize the atypical and the sordid. No one has yet suggested that we can get along without education simply because so many teachers are uninspired. The image of these other means of communication is created by the essential good they do. I suggest, therefore, that television be given the same treatment and that we encourage the best more by praising the best more. The American people spend more time before television sets than any other single activity, save sleeping. Some of what they see will be intrinsically good. From this beginning, we must strive to see that they get more. This is the way man has traditionally improved himself. Life is a many and multi-splendored thing; let us through television keep it that way.

My second suggestion is that television stations, like banks, businesses and educational institutions, should account annually for their program stewardship. This is not as difficult as it might seem; yet, it is not being done. It would require the appointment locally by the station of a board of judges of its distinguished citizens. These citizens would meet quarterly or bi-annually to review the station's total offerings. By singling out the best, they would re-emphasize the inherent good in a station's schedule, as measured by locally imposed standards. I believe this would encourage better programming and more public service, and I see no reason on earth why a corporation that files an annual report, or a bank that is made to file an annual accounting of its financial procedures. . . . I see no reason why these agencies should be required to file an annual report and to let television stations go without filing such an annual report.

And finally, may I suggest that the best in television is every bit as good as the best in motion pictures, the best in books, the best in art, and the best in music. A university that aspires to acquire the best in literature, painting and sculpture would do well to make plans now to conserve these better programs. There should and must be sound and sight libraries. These libraries should make available to you students some of the programs that I have been here talking about. A library built solely on print is, in the twentieth century, inadequate because it is not the only way people live. I suggest, therefore, that we get on with the business of conserving the best in television by putting it in libraries and making it available for frequent re-showing and evaluation.

In short, here are the things I want you to talk about: What is the best? What are the best? How many are worth repeating? Would you make a list, and then compare those with the total offering?

In the second place, would you agree with me that an annual accounting by a television station of its program stewardship is a wise and reasonable request?

And finally, would you agree with me that a sound and sight library is a must if we are to show people in the coming generation the way people lived in our generation?